

(by inserting a needle into a vein) or by mouth. Chemotherapy is traditionally given once every three to four weeks for a specified number of doses after surgery. When it is used prior to surgery to shrink the tumor, it is called *neo-adjuvant* chemotherapy.

Hormone therapy is used to inhibit hormones that may be helping cancer cells multiply. The majority of breast cancers require hormonal stimulation to grow. Blocking this stimulus will cause the cancer cells to stop growing. This can be achieved through oral medications like Tamoxifen® and Aromatase inhibitors or by surgically removing the ovaries.

clinical trials

M. D. Anderson Cancer Center Orlando is committed to improving the health and quality of life of the individuals and communities we serve. Cancer clinical trials are an important aspect of the care provided at our center. A cancer clinical trial is a research study that is conducted by healthcare professionals with the intent to improve the care and treatment of cancer patients. We conduct clinical trials that test new ways to detect, treat, reduce side effects, and improve the comfort and quality of life for people with cancer. The decision to participate in a clinical trial is very personal and should never be made lightly. To make an informed decision about your treatment, it is important to consider the possible advantages and disadvantages of a clinical trial and how your participation might affect you and your family. Your doctor will talk with you about the option of clinical trials.

m. d. anderson cancer center orlando

The M. D. Anderson name has long been synonymous with excellence and innovation. Our specialized multidisciplinary approach means each patient benefits from the expertise of a team of professionals including medical, radiation and surgical oncologists, pathologists and radiologists, nuclear medicine doctors and advanced practice nurses, along with support staff such as social workers, counselors, dietitians and pharmacists. You can be assured of receiving exceptional attention based upon your individual diagnosis and medical needs.

Our relationship with The University of Texas M. D. Anderson Cancer Center in Houston allows for expert consultation of the pathology and confirmation of diagnoses. We can also present patients in Orlando through our teleconferences with Houston and provide state-of-the-art treatment to diseases that otherwise do not have an established standard of care approach. In addition, unusual cases and atypical presentations can be discussed with experts in Pathology, Medical Oncology and Radiation Oncology.



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breast cancers

what is breast cancer?

Breast cancer is a disease in which cancer (malignant) cells are found in the tissues of the breast. Breast tissue is made up of glands for milk production, called *lobules*, and the ducts that connect lobules to the nipple. The rest of the breast is made up of fat, connective and lymphatic tissue.

Malignant breast tumors are referred to as *in situ* or invasive. *In situ* tumors are cancerous but usually do not spread beyond the area where they form.

Invasive tumors, or infiltrating tumors, may begin in the lobules or ducts of the breast but eventually invade the surrounding tissue. The stage of the disease depends on the degree of invasion of the tumor in the breast or to other organs of the body. *Local stage* breast cancer describes cancer that is confined to the breast. *Regional stage* tumors have spread to the lymph nodes, and *distant stage* cancers have metastasized (spread to other parts of the body).

The major types of breast cancer include:

- Ductal - originates from the cells of the ducts. This is the most common type of breast cancer.
- Lobular - originates in the lobes or lobules of the breast.

Both types can affect both breasts simultaneously or on separate occasions; however, the lobular type is more likely to affect both breasts. If left untreated, breast cancer may spread, sending cancerous cells to form tumors in other parts of your body. Consider your treatment options.

facts and figures about breast cancer

- Breast cancer is the most common type of cancer in women with more than 180,000 new cases of breast cancer diagnosed in the United States each year.
- At least one out of every eight women is at risk of developing breast cancer during her life span.
- One percent of all breast cancers occurs in men.
- White women over the age of 40 are more likely to be diagnosed with breast cancer than black women.
- Eight percent of breast cancers are genetic.

genetic testing

Genetic testing may be indicated for patients who have a strong family history of breast, ovarian, uterine, colon, or male breast cancer, or who were younger than 40 years of age when diagnosed with breast cancer.

Consultation with the genetic counselors is an integral part of the process.

key technologies and treatments

Breast cancer treatment at M. D. Anderson – Orlando is approached in a multidisciplinary manner. Technologies used in the treatment of breast cancer include surgery, radiation therapy, chemotherapy, and hormone therapy.

Surgery is the most common treatment method used for breast cancer. During the surgical procedure, the cancerous tissue is removed from the body, often with some lymph nodes, to determine whether the disease has spread beyond the breast tissue. Radiation, hormone therapy or chemotherapy, depending upon the stage and characteristics of the tumor, may follow surgery. Typical surgical procedures include:

- **Lumpectomy** - Involves removal of the cancerous tumor and a small amount of surrounding tissue.
- **Modified Radical Mastectomy** - Involves removal of the breast tissue and some regional lymph nodes.
- **Radical Mastectomy** - Involves the removal of the breast tissue and the underlying muscle, as well as some lymph nodes. This procedure is not used as frequently as it was in the past.
- **Sentinel Lymph Node Mapping** - A minimal surgical procedure that identifies patients who will benefit from the more extensive removal of lymph nodes.

Radiation therapy is used to shrink tumors, kill residual cancer cells after surgery, or to palliate from symptoms that may result from advanced disease.

Chemotherapy is the use of medication to kill cancer cells. It is commonly administered to the patient intravenously