

# *Florida Breast Cancer Coalition Research Foundation*

**Adjuvant therapy:** Additional treatment given in addition to surgery and radiation to the breast, to lower the chance of a cancer spreading beyond the breast. **Extended adjuvant therapy** can further improve the chance of staying cancer free after completing standard therapy (tamoxifen).

**Aromatase inhibitor:** A class of drugs that can slow or stop the growth of cancer that requires estrogen to grow by lowering the amount of estrogen made in the body. These drugs also can reduce the risk of cancer coming back. Brand names of this type of drug include Arimidex, Femara, and Aromasin.

**Biopsy:** The removal of cells or tissue with a needle or incision (surgery) for examination under a microscope.

**Calcification:** Tiny calcium deposits within the breast, singly or in clusters, often found by mammography. Macrocalcifications are large and not associated with cancer. Microcalcifications are much smaller, and sometimes can be the earliest changes on mammography of a cancer.

**Carcinoma:** Cancer that begins in the skin or in the tissues that line or cover the internal organs. Carcinomas are the most common form of cancer, accounting for 80-90% of all cancers.

**Chemotherapy:** Treatment with drugs to destroy cancer cells. Often used in addition to surgery or radiation if cancer has spread, has come back (recurred) or when there is a strong chance that it could recur.

**Core Biopsy:** A type of biopsy utilizing a needle to remove cells from a tumor for examination under a microscope. This method obtains a larger sample than the Fine Needle Aspiration Biopsy.

**Cyst:** A sac or capsule filled with fluid. Because a doctor cannot always tell if a lump in the breast is a cyst, fluid may be removed through a procedure called a needle aspiration.

**Digital Mammography:** A technique similar to standard film mammography, however the image is recorded directly onto a computer so it can be transmitted and shared electronically.

**Ductal Carcinoma In Situ (DCIS):** Abnormal breast cells that involve only the lining of a milk duct and these abnormal cells have not spread outside the duct into the surrounding normal breast tissue. Also called intraductal carcinoma.

**Estrogen:** Primary female hormone; one of a group of hormones found in both men and women.

**Fine Needle Aspiration Biopsy:** A type of biopsy utilizing a thin needle to remove cells from a tumor for examination under a microscope.

**FISH (Fluorescent In Situ Hybridization):** A test used to detect the increased expression of the HER2 gene on the inside of a tumor cell, making the tumor HER2-positive.

**HER2/neu:** A gene involved in how cells grow and multiply. In breast cancer cells that express HER2/neu, the drug Herceptin® (with a chemical name of trastuzumab) is an effective treatment.

**HER2-Positive Breast Cancer:** An aggressive form of breast cancer caused by too much of a gene called HER2 in tumor cells (overexpression). Women with breast cancer whose tumors test positive for HER2 overexpression are potential candidates for Herceptin® (chemical name trastuzumab).

**Hormone Receptor Positive:** Breast cancer cells that have receptors (proteins) that bind to the hormones **estrogen** and/or **progesterone** and depend on estrogen or progesterone to grow. Anti-estrogen therapies, such as tamoxifen or aromatase inhibitors, work effectively against this type of cancer cell.

**IHC (ImmunoHistoChemistry):** The most common test used to detect the overexpression of the HER2 protein on the outside of a tumor cell, making the tumor HER2-positive.

**Inflammatory Breast Cancer:** Occurs in sheets or nests rather than in a solid, confined tumor. Mammograms or ultrasounds often cannot detect inflammatory breast cancer. Women should monitor their breast for skin changes, lumps, discharge and notify their doctor of any changes.

**Invasive breast cancer:** Cancer that has spread beyond the layer of tissues in which it developed into surrounding, healthy tissues. Also called infiltrating cancer.

**Lumpectomy:** Surgery to remove the breast tumor and a small amount of surrounding normal tissue. A lumpectomy is almost always followed by radiation to reduce the risk of recurrence.

**Lymphedema:** An accumulation of lymphatic fluid in the interstitial tissue that caused swelling, most often in the arm(s) and leg(s), often caused by surgery for breast or other cancer when lymph nodes are removed.

**Lymph Node:** Small, bean-shaped organs that make and store the cells that fight infection; they are found in many places in the body, including under the arms and behind the ears.

**Mastectomy:** Surgery to remove all or part of the breast and sometimes other tissue.

**Metastasis:** The spread of cancer cells from the original site to other parts of the body.

**MRI:** Magnetic Resonance Imaging using magnetic fields and computers to make detailed pictures of the body that can then be analyzed by a radiologist.

**Needle Aspiration:** Removal of fluid from a cyst in the breast using a thin needle. The fluid is sometimes sent for examination under a microscope.

**Radiation Therapy:** Treatment with high-energy rays (such as X-rays) to eliminate or shrink cancer cells, given before or after surgery, or, in some cases, as the main treatment.

**Reconstructive Surgery:** Procedure to replace the breast which is removed (mastectomy) with tissue which is symmetric with the other breast. Reconstruction can be done with an implant, or with tissue moved from another part of the woman's body. The reconstruction of the breast can frequently be done during the same operation when the breast is removed, and is done by a specialist in plastic and reconstructive surgery.

**Sentinel Lymph Node Biopsy:** A diagnostic tool to determine if cancer has spread. Dye is injected near the cancer cells to trace the nearest lymph node. The lymph node is removed to reduce the risk of the cancer cells spreading and it is examined to determine if there are any cancer cells present.

**Stereotactic Needle Biopsy:** A method of needle biopsy that is useful in cases in which a mass can be seen on a mammogram, but cannot be found by touch. A computer maps the location of the mass to guide the placement of the needle.

**Tamoxifen:** A drug that can reduce the risk of a new breast cancer and delay the return of breast cancer. It blocks estrogen receptors on breast cancer cells and this can stop or slow down the growth of cancers that require estrogen to grow.

**Targeted Therapy:** A type of therapy that targets and attacks specific types of cancer cells, causing less harm to healthy cells. Herceptin® (trastuzumab) is an example of an approved targeted therapy for HER2-positive breast cancer.

**Triple Negative:** Breast cancer cells that do not express the hormone estrogen or progesterone receptors or HER2/neu and do not respond well to anti-estrogen therapy, tamoxifen or aromatase inhibitor, nor to anti-HER2 therapy, trastuzumab.

**Tumor:** An abnormal lump or mass of tissue. Tumors can be **benign** (not cancerous) or **malignant** (cancerous).

**Ultrasound (Ultrasonography):** A procedure in which sound waves (called ultrasound) are bounced off tissues and the echoes produce a picture (sonogram). Ultrasound can be used to evaluate lumps or masses to determine if they are solid (tissue) or cysts (filled with fluid).