

Oncology Terminology

A

Adenocarcinoma

A cancerous tumor that arises in or resembles glandular tissue.

Adjunct agent

In cancer therapy, a drug or substance used in addition to the primary therapy.

Adjuvant chemotherapy

A term used to describe the role of chemotherapy relative to other cancer treatments. It is typically given alone or with radiation after surgical resection.

Adjuvant radiation therapy

The use of radiation after treatment in order to prevent a cancer from recurring.

Anaplastic

A term used to describe cancer cells that divide rapidly and have little or no resemblance to normal cells.

Anastomosis

The joining together of two ends of healthy bowel after diseased bowel has been cut out (resected) by the surgeon. This may be contrasted to a colostomy, when the bowel ends may be permanently diverted, or anastomosed at a later surgery.

Antigen

A substance that is recognized by the body as being foreign and, as such, can trigger an immune response.

Archived Tumor Sample

A tumor sample that has been routinely preserved and stored. Tumor tissue is commonly preserved for storage by being treated with a preservative called formalin and then embedded in paraffin (wax).

Aromatase Inhibitor

A medication that reduces the amount of estrogen in the body. Aromatase inhibitors may be used to treat women with estrogen-receptor-positive breast cancer.

B

Barium enema

A barium enema is a series of x-rays of the lower gastrointestinal tract. The barium enema procedure consists of the insertion of barium (a radiolucent solution) to coat the lower gastrointestinal tract. The barium coats the lower gastrointestinal tract and x-rays are taken. On X-ray, areas in which the barium "lights up" may indicate abnormal cell proliferation. This procedure is also called a lower GI series.

Biopsy

A procedure where tumor tissue is removed from the body for laboratory examination to determine whether or not cancer is present. A biopsy can be performed using a needle to extract a small piece of tissue or as a surgical procedure to remove a larger piece of tissue.

BRCA1 and BRCA2

Genes that normally help control cell growth. A person who inherits an altered version of the BRCA1 and/or BRCA2 gene(s) has a higher risk of developing breast and ovarian cancer.

C

Cancer

A condition in which abnormal cells divide without control or fail to die as part of a normal cell's lifecycle. Cancer cells can also invade nearby tissues and can spread through the bloodstream and lymphatic system to other parts of the body.

Cancer staging

The process of assigning a descriptor (usually numbers I to IV) of how much a cancer has spread in the body. Criteria for staging include: size of tumor, amount of tissue penetration, whether it has invaded adjacent organs, how many lymph

Carcinoma

Any malignant cancer that comes from epithelial cells. Carcinomas will invade surrounding tissue, and have the propensity to metastasize to the lymph nodes and beyond.

Carcinoma in situ

Epithelial tumor cells confined to the tissue of origin, without invasion through the basement membrane.

Chemotherapy

Treatment with cytotoxic drugs that destroy cancer cells (fast-growing cells). Chemotherapy may be used in addition to surgery, and is sometimes used in combination with other therapies such as radiation therapy or hormonal therapy.

Chromosome

A microscopically visible carrier of genetic information.

Clinical Laboratory Services

The biological, microbiological, serological, chemical, immuno-hematological, hematological, biophysical, cytological, pathological or other examination of materials derived from the human body for the purpose of providing information for the diagnosis, prevention or treatment of any disease or impairment of—or the assessment of the health of—human beings.

Clinical Trial

A research study to test drugs, procedures or testing technologies to determine whether these are effective and/or safe.

Clinically Validated

Determination that a test is accurate in determining the presence of, or predicting the risk for, a health condition or phenotype, including determination of sensitivity, specificity and positive and negative predictive values.

Colectomy

Surgical resection of all or part of the colon (also called the large intestine).

Colitis

Inflammation of the colon. Colitis has many forms including ulcerative, Crohn's, infectious, pseudomembranous, and spastic.

Colon polyp

A fleshy growth on the inside (the lining) of the colon.

Colonoscopy

Inspection through a fiber-optic scope of the inside of the colon.

Colorectal

Related to the colon and/or rectum.

Core Biopsy

A procedure which uses a needle to remove a small, intact sample of tissue from an identified breast mass in order to examine it and obtain a preliminary diagnosis.

D**Diagnosis**

Identification of a condition, such as breast cancer, by its signs and symptoms and the results of laboratory tests or other examinations.

Distant Recurrence

The spread of cancer to parts of the body other than the place where the cancer first occurred. In breast cancer, the cancer can spread to the lungs, liver, brain or bones.

Dukes staging system

A system of staging rectal cancers developed by Cuthbert Duke in 1932. The original system had 3 stages but has been modified over time to include four stages with variations on two of the four stages.

Dysplasia

A term that refers to abnormal cells that have the potential to progress to cancer.

E**Early-Stage Breast Cancer**

A term that can be used to describe stage I and II, lymph-node-negative breast cancer.

Endoscope

A long slender medical instrument for examining the interior of a bodily organ or performing minor surgery.

Endoscopy

Visual examination of a bodily orifice, canal or organ using an endoscope.

ER (Estrogen Receptor)

A feature (protein) that may be present on certain cells to which estrogen molecules can attach. The term "ER positive" refers to tumor cells that contain the estrogen-receptor protein. These cells are generally sensitive to hormone therapy.

G**Gastroenterologist**

A physician who specializes in diseases of the gastrointestinal tract.

Gastroenterology

The branch of medicine that focuses on the digestive system and its disorders.

Gene

The functional and physical units of inheritance that are passed from parents to their offspring. The genes found in normal breast tissue can change their "expression" (see below), which can give rise to breast cancer.

Gene Expression

The level of activity of a gene or group of genes.

Gene Expression Profile

A picture of the activity or expression of multiple genes from a single specimen.

Genetics

The study of genes and heredity. Heredity is the passing of genetic information and traits, such as eye color or an increased chance of getting a certain disease, from parents to offspring.

Genome

The complete genetic material of a living thing.

Genomic Test

A test that looks at groups of genes and how active they are. This activity can influence how a cancer is likely to grow and respond to treatment.

Genomics

The study of complex sets of genes, how they are expressed in cells (what their level of activity is), and the role they play in biology.

H**Hand Foot Syndrome (Palmar-Plantar Erythrodysesthesia)**

Also called hand-foot syndrome or hand-to-foot syndrome, Palmar-Plantar Erythrodysesthesia is a side effect, which can occur with several types of chemotherapy or biologic therapy drugs used to treat cancer. Leakage of the drug through the capillaries of the skin of the hands and feet can cause redness, tenderness, and peeling of the skin of the palms and soles.

Hereditary Nonpolyposis Colon Cancer (HNPCC)

An inherited cancer syndrome. Individuals with HNPCC have an increased risk of developing colon and rectal cancer, as well as other types of cancer.

Hormonal Treatment (Hormone Therapy)

Medications used to reduce the effect of hormones in the body. In many cases of breast cancer, hormones can fuel the growth of breast cancer. Common hormonal therapies include tamoxifen and a newer class of drugs called aromatase inhibitors. Hormonal therapies are used to treat women with estrogen-receptor-positive breast cancer.

Hormone Receptor

A protein on the surface of a tumor cell that binds to a certain hormone, activating tumor growth.

Human Genome Project

An international research and technology-development effort aimed at mapping and sequencing the entire genome of human beings.

I**In Situ**

Non-invasive cancer in which abnormal cells are isolated within the lobes or milk ducts of the breast and have not spread to nearby tissue.

Invasive Breast Cancer

Cancer that has spread from where it started in the breast into surrounding, healthy tissue. Most invasive breast cancers start in the ducts (tubes that carry milk from the lobules to the nipple). Invasive breast cancer can spread to other parts of the body through the blood and lymph systems. Invasive breast cancer is also called infiltrating breast cancer.

L**Local Recurrence**

The reappearance of cancer in the part of the body where it first occurred.

Lumpectomy

A surgical procedure that removes a localized mass of tissue, including the breast cancer tumor and a small amount of normal, non-cancerous tissue surrounding the tumor.

M

Malignant

Tending to be severe and become progressively worse; a malignant tumor is one that has the ability to invade and destroy nearby tissue and/or spread (metastasize) to other parts of the body.

Mastectomy

A surgical procedure to remove all or a large part of the breast.

Metastasize

A term that is used to refer to cancer spreading from its site of origin to other sites in the body.

Metastatic Breast Cancer

Breast cancer that has spread beyond the breast and local lymph nodes to other parts of the body such as the lungs, liver, brain or bones or other tissues.

Molecular Diagnostics

The measurement of DNA, RNA, proteins or metabolites to detect genotypes, mutations or biochemical changes.

N

Newly Diagnosed

A term used to describe breast cancer that has recently been identified.

Node-Negative Breast Cancer

Breast cancer that has not spread to the lymph nodes.

Node-Positive Breast Cancer

Breast cancer that has spread to the lymph nodes (most commonly the axillary lymph nodes under the arms).

O

Oncotype DX[®] Test

The Oncotype DX breast, colon, and prostate cancer assays are unique diagnostic tests that help patients and their physicians make informed, individualized treatment decisions. To learn more about the Oncotype DX tests for DCIS, breast, colon and prostate cancer please visit the Oncotype DX product website or call Tel: +1 (888) ONCOTYPE

Oncologist

A physician who specializes in the study and treatment of tumors.

Oncology

The study and treatment of cancer.

P

Pathologist

Physician who identifies diseases by studying cells and tissues under a microscope.

Pathology Report

A report ordered by authorized healthcare professionals that describes what was found in tissue removed from the patient's body. The report is generated after the tumor and surrounding tissue are checked by a pathologist. It usually includes information on the tumor's grade and stage.

Polyethylene glycol

An electrolyte-based laxative solution used to clean the bowel before a gastrointestinal exam.

Polyp

A usually nonmalignant growth or tumor protruding from the mucous lining of an organ, such as the colon. Colon polyps are fleshy growths that occur on the inside (the lining) of the large intestine.

PR (Progesterone Receptor)

A feature (protein) that may be present on certain cells to which progesterone molecules can attach. The term "PR positive" refers to tumor cells that contain the progesterone receptor protein. These cells are generally sensitive to hormone therapy.

Predispose

To make more likely or render susceptible.

PSA (Prostate-specific antigen)

A protein exclusively produced by the prostate. Increased levels of PSA may be found in the blood of men who have prostate cancer or other prostate diseases such as BPH (benign prostatic hyperplasia) or inflammation of the prostate.

R

Radiation Therapy

The use of radiation to destroy cancer cells. Radiation therapy may be used before or after surgery, and is sometimes used in combination with chemotherapy. Radiation is used for local control of the cancer at the site of the tumor.

Recurrence

The return of cancer after treatment. This can be either local (at the site of the original tumor), or distant (beyond the original site).

Resection

Surgery to remove a cancer and some surrounding tissue.

S

Sarcoma

A malignant tumor growing from connective tissues, such as cartilage, fat, muscle, or bone.

Screening (for breast cancer)

Looking for masses or suspicious areas in breast tissue on a periodic basis.

Screening (for colon cancer)

Looking for masses or suspicious areas in colon tissue on a periodic basis.

Sigmoidoscopy

Inspection through a fiber-optic scope of the inside of the sigmoid colon, which is part of the large intestine that empties into the rectum. The test is useful for diagnosing the cause of diarrhea, constipation, or abdominal pain, and for identifying cancerous tissue.

Stage I Breast Cancer

The tumor is up to 2 centimeters in diameter and has not spread beyond the breast.

Stage IIA Breast Cancer

The tumor is up to 2 centimeters and has spread to the axillary lymph nodes under the arm, or the tumor is between 2 and 5 centimeters and has not spread to the lymph nodes.

Stage IIB Breast Cancer

The tumor is between 2 and 5 centimeters and has spread to the lymph nodes under the arm, or the tumor is larger than 5 centimeters in diameter and has not spread to the lymph nodes.

Stage IIIA Breast Cancer

The tumor is larger than 5 centimeters in diameter and has spread to the lymph nodes under the arm, or the tumor is any size and has spread more extensively in the lymph nodes.

Stage IIIB Breast Cancer

The tumor is any size and has extended to other tissues near the breast; the tumor may or may not have spread to the lymph nodes.

Stage IV Breast Cancer

Cancer that has spread (metastasized) to other locations in the body, such as the lungs, liver, bones or brain.

Staging

A classification system for breast cancer based on the size of the tumor, whether the cancer has spread to the lymph nodes, and whether the cancer has spread to other sites in the body (metastasis).

Surveillance/Follow-Up

An ongoing assessment by a patient's medical team, once treatment has been completed, to assess the cancer's remission and to look for any evidence of a cancer's return.

Synchronous cancer

Multiple primary cancers occurring simultaneously.

Syndrome

A set of signs and symptoms that tend to occur together and which reflect the presence of a particular disease or an increased chance of developing a particular disease.

T

TAILORx

Although the *Oncotype* DX test has already been approved for use, research involving the test is ongoing. The *Oncotype* DX test plays a key role in a current clinical trial, the **Trial Assigning Individualized Options for Treatment (Rx)**, known as TAILORx. Participants will be divided into different treatment groups depending on their **Recurrence Score**[®] results. Patients with **Recurrence Score** results of less than 11, who are at low risk for recurrence and for whom chemotherapy is expected to provide little benefit, will

receive hormone therapy alone. Patients with Recurrence Score results greater than 25, who are at higher risk for recurrence and for whom chemotherapy is expected to provide substantial benefit, will receive hormonal therapy and chemotherapy. Patients with Recurrence Score results between 11 and 25, whose risk for recurrence is moderate and for whom the benefit of chemotherapy is unclear, will be randomized to treatment with hormonal therapy plus chemotherapy versus hormonal therapy alone. The primary objective of the trial is to determine whether hormonal therapy alone offers no less benefit than chemotherapy plus hormonal therapy in women whose Recurrence Score results range from 11 to 25. For more information, [click here](#).

Tamoxifen

A medication that interferes with the activity of the hormone estrogen to prevent it from fueling the growth of breast cancer. Tamoxifen is used to treat women with estrogen-receptor-positive breast cancer.

TNM Classification of Malignant Tumors (TNM)

A cancer staging system that describes the extent of cancer in a patient's body. TNM literally describes Tumor/Nodes/Metastasis. T describes the size of the tumor and whether it has invaded nearby tissue, N describes the number of regional lymph nodes that are involved, and M describes the presence of other metastases. This system is jointly maintained by the International Union Against Cancer (UICC), and the American Joint Committee on Cancer.

Treatment Monitoring

An ongoing and frequent assessment by the medical team, during the time of treatment, to monitor how the patient is tolerating the treatment and how the cancer is responding.

Tumor

Tissue growth where the cells that make up the tissue have multiplied uncontrollably. A tumor can be benign (non-cancerous) or malignant (cancerous).

Tumor Grade

The characterization of a tumor based on how similar in appearance the cancer cells are to normal cells, and on how many of those tumor cells are dividing. Tumor grade is one of many factors that, when used in combination, can indicate how aggressive a patient's cancer is.

Tumor Stage

This is a number that refers to the size of the tumor and whether the cancer has spread. Tumor stage, expressed as the tumor T score, is one of many factors that, when used in combination, can indicate how aggressive a patient's cancer is.

U

Ulcerative colitis

A disease where sores, or ulcers, form in the top layers of the lining of the large intestine. Inflammation usually occurs in the lower part of the colon and rectum.

W

Wire Localization Biopsy

A type of biopsy performed when an abnormality can be seen on a mammogram but cannot be felt. A wire localization biopsy utilizes a mammogram to locate and identify the breast abnormality, after which a biopsy is performed