

Part I: Cancer Terms to Know: Basic Oncology Terms

Cancer terms may sometimes be difficult to understand. You may hear your doctor use certain medical terms, and you may not know what they mean. It is important to understand these terms, so you can make the best informed decision about your cancer treatment.

This is the first in a four-part series of articles designed to help people with cancer understand commonly used medical terms. The articles will address terms used throughout the cancer experience, from a new diagnosis to during and after treatment. The following article defines basic oncology terms, including those used in the detection of cancer.

Antibodies: Proteins in the immune system that recognize and attach to foreign molecules, called antigens.

Benign: A tumor that is not cancerous. The tumor does not invade nearby tissue or spread to other parts of the body.

Biopsy: Removal of a tissue sample that is then examined under a microscope to check for cancer cells.

Carcinoma: Cancer that starts in skin or tissues that line the inside or cover the outside of internal organs.

Chemotherapy: Drugs used to destroy cancer cells by interfering with their growth and/or preventing their reproduction.

Chromosome: A microscopic structure in the nucleus of a cell that contains genes.

Clinical trial: Research studies that test new treatment and prevention methods to find out if they are safe, effective, and better than the current standard of care (the best known treatment).

DNA (deoxyribonucleic acid): The molecules inside cells that

store genetic information.

Endpoint: The results measured at the end of a study to see if a given treatment has worked.

Epidemiology: The study of the patterns, causes, and control of disease in groups of people. The study of cancer may involve looking at how many people have cancer; who develops specific types of cancer; and what factors, such as genetics or personal behavior, play a role in the development of cancer.

Gene: A length of DNA that carries the genetic information necessary for production of a protein. Genes are located on chromosomes and are the basic units of heredity.

Genetic testing: The analysis of a person's DNA to check for genetic mutations (changes) that carry an increased risk of or predisposition to cancer.

Hormone: A substance produced by an organ or gland that is carried by the blood and produces a specific effect on other organs or glands.

Malignant: A tumor that is cancerous. The tumor may invade nearby healthy tissue or spread to other parts of the body.

Metastasis: The spread of cancer from where the cancer began to another part of the body. Cancer cells can break away from the primary tumor and travel through the blood or the lymphatic system to the lymph nodes, brain, lungs, bones, liver, or other organs.

Oncogene: A normal gene that when mutated plays a significant role in causing cancer.

Palliative: Treatment of the physical, spiritual, psychological, and social needs of a person with cancer. Its purpose is to improve

quality of life.

Precancerous: Changes in cells that may, but do not always, become cancer. Also called pre-malignant.

Predisposition: A tendency to develop a disease that can be triggered under certain conditions. Although a predisposition to cancer increases a person's risk of developing cancer, it is not certain that the person will develop it.

Remission: The disappearance of the signs and symptoms of cancer, but not necessarily the entire disease. The disappearance can be temporary or permanent. *Complete remission* means all known tumors have disappeared. *Partial remission* refers to a greater than 50% reduction of tumor mass.

Part II: Cancer Terms to Know: Newly Diagnosed

This is the second in a four-part series of articles designed to help people with cancer understand commonly used oncology terms. The following article defines cancer terms that you may hear your doctor use if you are newly diagnosed with cancer.

Acute: Symptoms that start and worsen quickly but do not last over a long period of time.

CBC (complete blood count): A test to check the number of red blood cells, white blood cells, and platelets in a sample of blood. Platelets are the components of blood that help it to clot.

Chronic: A disease or condition that persists or progresses over a long period of time.

In situ: Cancer that has not spread to nearby tissue. Also called

non-invasive cancer.

Invasive cancer: Cancer that has spread outside the layer of tissue in which it started and is growing in other tissues or parts of the body. Also called infiltrating cancer.

Localized cancer: Cancer that is confined to the area where it started and has not spread to other parts of the body.

Neutropenia: An abnormal decrease in the number of neutrophils in the blood. Neutrophils are a type of white blood cell that fights infection.

Prognosis: Chance of recovery; a prediction of the outcome of a disease.

Protocol: An action plan for how a clinical trial will be carried out. It states the goals and timeline of the study, who is eligible to participate, what treatments and tests will be given and how often, and what information will be gathered.

Regimen: A treatment plan that includes which treatments and procedures will be done, medications and their doses, the schedule of treatments, and how long the treatment will last.

Stage: A measurement given or a diagnosis that describes the size of the original tumor and identifies whether the tumor has spread to lymph nodes or other parts of the body.

Standard of care: A set of common guidelines that is followed for the diagnosis and treatment of a certain type of disease.

Part III: Cancer Terms to Know: During Treatment

This is the third in a four-part series of articles designed to help

people with cancer understand commonly used oncology terms. The following article defines cancer terms that you may hear your doctor use when you are being treated for cancer.

Adjuvant therapy: Treatment given after the main treatment. It usually refers to chemotherapy, radiation therapy, hormone therapy, or immunotherapy given after surgery to reduce the chance of cancer coming back.

Biologic therapy: Treatment to stimulate or restore the ability of the immune system (the body's defense) to stop or slow the growth of cancer cells or help control side effects. (Also called biologic therapy, immunotherapy, or biologic response modifier [BRM] therapy.)

Chemoprevention: The use of drugs, vitamins, or other agents to reduce the chance of developing cancer or having cancer come back.

Complementary and alternative medicine (CAM): CAM is a term used to describe a diverse group of treatments, techniques, and products that are not considered to be conventional or standard medicine. Specifically, complementary medicine is used in addition to conventional treatments (an approach that is also called integrative medicine). Alternative therapies are unproven treatments used instead of standard treatments.

Hormone therapy: Treatment that removes, blocks, or adds hormones to kill or slow the growth of cancer cells. (Also called hormonal therapy or endocrine therapy.)

Neoadjuvant therapy: Treatment given before the main treatment. It may include chemotherapy, radiation therapy, or hormone therapy given prior to surgery to shrink a tumor so it is easier to remove.

Radiation therapy: The use of high-energy rays (such as x-rays) to kill or shrink cancer cells. The radiation may come from a machine outside the body (external radiation) or from radioactive materials placed in the body near cancer cells (brachytherapy or internal radiation). (Also called radiotherapy.)

Standard treatment: Treatment that has been scientifically tested, found to be safe and effective, and approved by the U.S. Food and Drug Administration (FDA). (Often called conventional treatment.)

Targeted treatment: A form of cancer therapy that takes advantage of the biologic differences between cancer cells and healthy cells by “targeting” faulty genes or proteins that contribute to cancer growth. The treatment blocks the spread of cancer cells without damaging the normal cells, thus leading to fewer side effects.

Part IV: Cancer Terms to Know: After Treatment

This is the last in a four-part series of articles designed to help people with cancer understand commonly used oncology terms. The following article defines cancer terms that you may hear your doctor use once you have finished treatment.

Cure: To fully restore health. This term is sometimes used when a person's cancer has not returned for at least five years after treatment.

Disease-free survival (DFS): The length of time after treatment during which no cancer is found (complete remission). This term can be used for an individual or for a group of people within a study.

Event-free survival: The length of time after treatment that a group of people in a clinical trial has not had cancer relapse or

progression. This term is usually used only in scientific research.

Follow-up care plan: A patient's plan written by his or her oncologist following treatment that summarizes the therapy(ies) and outlines long-term care needs. This may include how often the person needs to see a doctor and any future tests needed. It may also include advice on healthy lifestyle choices, information about available psychosocial services, employment counseling, and access to health insurance.

Late effects: Side effects of cancer treatment that appear months or years after treatment has ended. This may include physical and mental problems, as well as development of secondary cancer.

Progression-free survival: The length of time during and after treatment that the cancer does not progress or grow.

Recurrence: Cancer that has returned after a period of time when the cancer could not be detected. *Local recurrence* means that the cancer has come back to the same place as the original cancer. *Regional recurrence* refers to cancer that has come back after treatment in the lymph nodes near the original cancer site. *Distant recurrence* is when cancer spreads after treatment to other parts of the body.

Relative survival: The length of time after treatment that a person with cancer lives, excluding all other causes of death but cancer.

Remission: The disappearance of the signs and symptoms of cancer but not necessarily the entire disease. The disappearance can be temporary or permanent. *Complete remission* means all known tumors have disappeared. *Partial remission* refers to a greater than 50% reduction of tumor mass.