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# Cancer Glossary: Definitions & Phonetic Pronunciations

# Α

# abdomen [AB-duh-men]

The part of the body between the chest and the pelvis. It includes the stomach (with the lower part of the esophagus), small and large intestines, liver, gallbladder, spleen, pancreas, and other organs.

# ablate [ab-late]

To remove or destroy the function of an organ or body tissue. See also **ablation**.

# ablation [a-BLAY-shun]

Treatment to remove or destroy all or part of a body part or tissue. Can also be used to remove or stop the function of an organ. For example, removing the ovaries or testicles or taking medicines that stop them from making hormones would be called ablation. Besides surgery and drug treatment, other ways of ablating body tissues and tumors include extreme heat, freezing, and chemicals. Also called **ablative** ( **ab-LAY-tive**) **therapy**.

# abscess [ab-SES]

A collection of pus in tissues, organs, or other parts of the body.

#### absolute risk [ab-so-loot risk]

The likelihood a person will develop a disease (such as a type of cancer) over a certain period of time. Absolute risk is shown as a fraction or percentage. For example, in the US, the average absolute risk of a man developing colorectal cancer in his lifetime is about 4%. In other words, in a group of 100 men, about 4 will develop colorectal cancer in their lifetime.

# acquired mutation [uh-KWY-erd myoo-TAY-shun]

A mutation (change) in DNA that starts in one cell of the body after a person is born. This mutation is then passed on to any new cells that arise from that cell. In some cases, acquired mutations can lead to cancer. This is different from inherited mutations, which are present at birth and in almost all the cells of the body. Acquired mutations are not passed on to children.

#### actinic keratosis [ak-TIH-nik KAYR-uh-TOH-sis]

A rough raised area of skin that can develop after a lot of sun exposure. They are benign (not cancer), but over time a few can develop into **squamous cell cancer**. It is often found on areas of the skin that are frequently exposed to the sun like face, scalp, neck, forearms, and the back of the hands. Also called **solar keratosis**.

# active surveillance [AK-tiv ser-VAY-lents]

Watching a patient's condition closely without giving them any treatment. During active surveillance, certain exams and tests are done regularly. If there are changes to these test results, treatment may be recommended. Active surveillance may be part of a treatment plan for certain types of cancers like prostate cancer.

#### adenocarcinoma [A-deh-noh-KAR-sih-NOH-muh]

Cancer that starts in glandular tissue. Glandular tissue makes and secretes a substance, such as in the breast (milk) or in the gland cells of the prostate (seminal fluid).

#### adenoma [A-deh-NOH-muh]

A benign growth (not cancer) that starts in glandular tissue. Glandular tissue makes and produces a substance. For example, glandular tissue in the ducts or lobules of the breast produce milk, and the gland cells of the prostate produce seminal fluid.

# adenomatous polyp [ad-no-muh-tus or ad-uh-NO-muh-tus pa-lip]

A benign (not cancer) growth of abnormal glandular cells. These can become cancer, so they are usually removed when found. For example, 3 types of adenomas that can grow in the colon are **tubular**, **villous**, and **tuberovillous**. In each type, the cells are arranged differently, but there is some overlap so that an adenoma can have both tubular and villous features. See also **glandular cells**, **hyperplastic polyp**, **inflammatory polyp**, **polyp**, **tubular adenoma**, **villous adenoma**.

#### adhesions [ad-HEE-zhunz]

Scar tissue that can form after surgery or injury. If the scar tissue tightens, it may bind organs together that are normally separate. This can sometimes cause problems, for instance, if there is partial or total blockage of the intestine.

# adjuvant therapy [ad-juh-vunt]

Treatment used in addition to the main treatment. It usually refers to hormone therapy, chemotherapy, radiation therapy, or immunotherapy added after surgery to increase the chances of curing the disease or keeping it in check.

#### advance directive

A legal document that tells a person's health care provider and loved ones his or her wishes about their health care if the person later becomes unable to make decisions for him or herself. This may include whether to start or when to stop life-sustaining treatments. Another type of advance directive lets you choose a person to make decisions for you if you become unable to do it for yourself.

#### advanced cancer

Cancer that has spread from where it started (the primary site) to other parts of the body. When the cancer has grown outside the body part where it started but has not yet spread to other parts of the body, it is called **locally advanced cancer**. If it has spread to other parts of the body, it is called **metastatic cancer**.

#### aggressive cancer

location, and if it has grown into nearby areas. **N** describes the spread of cancer to nearby lymph nodes, and **M** describes metastasis (the spread of cancer to distant parts of the body).

#### allogeneic stem cell transplant [A-loh-jeh-NAY-ik]

Uses bone marrow or stem cells from a donor whose tissue type closely matches the patient's to replace blood-forming cells that have been destroyed by disease or cancer treatment. This can be from a related donor or an unrelated donor. See also **stem cells**.

# alopecia [al-o-PEE-shuh]

Hair loss, which can include loss of scalp hair, body hair, eyebrows, and eyelashes as well as pubic hair. This often happens with chemotherapy treatment or radiation therapy. In most cases, the hair grows back after treatment ends.

# alpha blocker [al-fuh]

A drug that relaxes smooth muscle tissue. Alpha blockers are sometimes used to help men who have trouble passing urine because of benign prostatic hyperplasia (BPH) by improving the flow of urine and blood. See also **benign prostatic hyperplasia**.

#### alternative medicine

An unproven or disproven therapy that is used **instead** of standard (proven) medical treatment. Some examples of alternative medicines are special diets, certain supplements or herbs, or high doses of vitamins. The American Cancer Society recommends that patients thinking about using any alternative therapy discuss it first with a member of their cancer care team. Some alternative therapies are known to cause harmful or even life-threatening side effects. With others, the main danger is that the patient may lose the chance to benefit from standard treatment. See also **complementary therapy**.

#### ambulatory [AM-byou-luh-tor-ee]

Being able to walk or walking. **Ambulatory care centers** treat outpatients, that is, people who are not staying overnight in a hospital. Short procedures or treatments are often done in such centers.

# Amsterdam criteria [am-STIR-dam cry-TEER-ee-uh]

Criteria doctors use to identify families who might have hereditary non-polyposis colon

cancer (HNPCC). Not all people who have HNPCC meet these criteria, but people who meet the criteria may want to consider genetic testing.

#### analog [an-uh-log]

A substance that is similar, but not identical to another substance. For example, a manmade version of a naturally occurring substance. See also **LHRH analogs**.

#### anastomosis [uh-NAS-toh-MOH-sis]

A procedure in which a diseased part of a tubular body structure is removed, and the ends of healthy sections are reconnected.

# androgen [AN-druh-jen]

Hormones found in males and females but with much higher levels in males; commonly called male sex hormones. The major androgen is testosterone.

#### anecdotal report [an-neck-DOE-tul]

Individual or personal report, an incomplete description from one or more patients. It's not the same as the results of a scientific study.

#### anemia [uh-NEE-mee-uh]

A condition caused by a low red blood cell count.

#### anesthesia [an-es-THEE-zhuh]

The loss of feeling or sensation as a result of medicines or substances to keep patients from feeling pain during surgery or other procedures.

- **General anesthesia**causes loss of consciousness (puts you into a deep sleep so you don't feel pain).
- •
- Localorregionalanesthesianumbs only a certain area, so you won't feel pain there.

#### anesthesiologist [an-es-thee-zee-AHL-uh-jist]

A doctor who specializes in giving drugs or other agents (like gasses) that can cause a

total loss of feeling, put a patient into a deep sleep, or relieve pain, most often during surgery.

aneuploid [AN-you-ploid]

See ploidy.

angiogenesis [an-jee-o-JEN-uh-sis]

#### anti-emetic [an-tee-ih-MEH-tik or an-tie-ih-MEH-tik]

A drug that prevents or relieves nausea and vomiting.

# anti-estrogen [an-tee-ES-tro-jen or an-tie-ES-tro-jen]

Something (for example, the drug tamoxifen) that blocks cells from making estrogen. Anti-estrogens are used to treat breast cancers that depend on estrogen for growth and are being studied for use in treating other types of cancers. An anti-estrogen is a type of hormone antagonist. Also called **estrogen blocker**.

#### antibiotic [an-tee-by-AH-tick or an-tie-by-AH-tick]

Drug used for treating infections caused by bacteria and other germs.

#### antibody [AN-tih-bah-dee]

A protein made by immune system cells and released into the blood. Antibodies defend the body against foreign agents, such as bacteria and are produced in response to antigens (substances that cause the body's immune system to respond in a specific way).. Each antibody can only work to destroy one certain antigen.

# antigen [an-tuh-jen]

A foreign substance that causes the body's immune system to respond by making antibodies. For example, the immune system responds to antigens that are part of bacteria and viruses to help people resist infections. Certain cancer cells have antigens that can be found by lab tests. The antigens can help in diagnosing those cancers and in watching response to treatment. Other cancer cell antigens play a role in immune reactions that may help the body resist cancer.

#### antimetabolites [an-tee-muh-TAB-o-lites or an-tie-muh-TAB-o-lites]

Substances that interfere with the body's chemical processes, such as those that create proteins, such as deoxyribonucleic acid (DNA) and other chemicals needed for cell growth and reproduction. In treating cancer, antimetabolite drugs disrupt DNA production, which in turn prevents cell division and tumor growth.

# antioxidants [an-tee-OX-uh-dunts or an-tie-OX-uh-dunts]

Substances that protect cells from damage caused by the process of oxidation during metabolism. Some vitamins, such as vitamins C and E and beta-carotene are

antioxidants. Antioxidants that are found in foods are thought to reduce the risk of some cancers. But taking certain antioxidants as supplements has been linked to higher cancer risk in some people.

#### APC gene

A gene that helps keep cell growth balanced. Inherited changes in this gene can cause familial adenomatous polyposis (FAP) and Gardner syndrome. People who have a mutation (change) in this gene can develop hundreds of polyps in the colon.

# apheresis [a-fur-REE-sis]

A procedure that takes blood out of the body, part of the blood is removed, and the rest of the blood is infused back into the body. Called **plasmapheresis** if plasma is removed, **leukapheresis** if white blood cells are removed, or **platelet pheresis** when platelets are removed. Might also be called **pheresis** (fur-ree-sis).

# apoptosis [a-pop-TOE-sis]

Programmed cell death. Apoptosis is controlled by genes that cause cells to die at certain times, for example, when DNA is damaged. The process of apoptosis may be blocked in cancer cells. Some drugs used to treat cancer cause apoptosis.

#### aromatase inhibitors

Drugs that keep the adrenal glands from making estrogens. They are used to treat hormone-sensitive breast cancer in women after menopause. Examples include anastrozole (Arimidex®), letrozole (Femara®), and exemestane (Aromasin®). Aromatase inhibitors are being tested to find out if they can also be used to reduce breast cancer risk in women after menopause.

#### aspiration [asp-er-A-shun]

To suction out a liquid, gas, or tissue fragments. It could also mean to accidentally inhale food or liquids into the lungs (aspirate).

# asymptomatic [a-simp-tuh-MAT-ik]

Not having any signs or symptoms of a disease.

ataxia-telangiectasia mutation (ATM) [a-tax-ee-yuh tel-an-jee-eck-TAY-zhuh]

An inherited mutation in a certain gene responsible for repairing damaged DNA. Ataxiatelangiectasia is a rare, inherited, progressive, degenerative disease of childhood that causes loss of muscle control, a weakened immune system, and an increased risk of cancer. If this mutation is present, the carrier may have a higher risk of several types of cancer.

# attributable risk [at-trib-ut-a-ble risk]

How much a known factor increases the risk of a disease (such as cancer). Usually given as a percentage, it compares the percentage of people who were exposed to the risk factor and developed the disease to the percentage of people who were not exposed but developed the same disease. For example, if the attributable risk of a factor for a certain type of cancer is 80%, it means that 80% of people who developed this cancer were exposed to that factor, and 20% of people who developed the cancer were not exposed.

# atypia [a-tip-ee-yuh]

Not normal; atypical. Often refers to the appearance of cancerous or pre-cancerous cells.

atypical [a-tip-uh-kul]

Not usual; abnormal.

autologous [aw-tahl-uh-gus]

# gastrointestinal tract.

# basal cell carcinoma [bay-sul or bay-zul sell car-sin-O-ma]

the most common type of skin cancer. It begins in the lowest layer of the epidermis (the outer layer of the skin), called the *basal cell* basal cell

prevent fractures, and in some cases, help strengthen bones.

# blood count

A count of the number of cells in a given sample of blood.

# body image

Internal radiation treatment that uses a radiation source that's usually sealed in a small holder called an implant. The implant is placed in the body, very close to or inside the tumor.

#### brain scan

An imaging method used to find anything that isn't normal in the brain, including brain cancer and cancer that has spread to the brain from other places in the body. This scan can be done in an outpatient clinic. It is painless, except for the needle stick when a radioactive substance (**radioisotope**) is put into a vein. The radioactive substance can be seen in pictures as it collects in abnormal areas.

#### BRCA1

A gene which, when damaged (mutated), puts a person at higher risk of developing breast, ovarian, pancreatic, prostate, and other types of cancer, compared to people who do not have the mutation..

#### **BRCA2**

A gene which, when damaged (mutated), puts a person at higher risk of developing breast, ovarian, pancreatic, prostate, and other types of cancer when compared to people who do not have the mutation

#### **BRCAPRO**

A tool used to help health professionals estimate a woman's breast cancer risk. It estimates breast cancer risk based on certain risk factors.

#### breast specialist

A health care professional who has a dedicated interest in breast health. While he or she may have specialized knowledge in this area, medical licensing boards do not certify a specialty in breast care.

# bronchoscopy [brong-kah-skuh-pee]

A look at the bronchi in the lungs using a thin, flexible, lighted tube that goes down the throat. This instrument is called a **bronchoscope**.

# C

#### CA 19-9

A tumor marker sometimes produced by colorectal, stomach, bile duct, and pancreatic cancers. It may also be produced in non-cancer conditions.

#### cachexia [ka-kek-see-uh]

A significant loss of weight and muscle mass caused by loss of appetite and poor nutrition.

# calcifications [kals-if-ik-A-shuns]

Tiny calcium deposits within the breast, seen alone or in clusters. They are often found on a mammogram. Very small deposits may be called **microcalcifications**. They are a sign of changes within the breast that may need to be followed by more mammograms, or by a biopsy.

#### cancer

A group of diseases in which cells in the body change and grow out of control. Most types of cancer cells form a lump, or mass called a tumor. Not all tumors are cancer. A tumor that is not cancer is called **benign**. A cancerous tumor is called **malignant**. A cancerous tumor can invade and destroy healthy tissue.

#### cancer care team

The group of health care professionals who work together to find, treat, and care for people with cancer. Whether the team is linked formally or informally, there is usually one person who coordinates the team.

#### cancer cell

A cell that divides and reproduces abnormally and can spread throughout the body, crowding out normal cells and tissue. Cancer cells develop because of multiple changes to certain genes.

#### cancer screening tests

See **screening**.

#### cancer surveillance

The ongoing, timely, and systematic collection and analysis of information on new cancer cases, extent of disease, screening tests, treatment, survival, and cancer deaths for public health reasons.

#### cancer susceptibility genes

Genes that could increase a persons risk for some cancers if they have certain mutations Susceptibility genes are usually inherited from parent(s).

#### cancer vaccine

A vaccine used to help a person's immune system attack cancer cells. The goal is to help treat cancer or to help keep it from coming back after other treatments. But there are also some vaccines (the HPV vaccine, for example) that may actually help prevent certain cancers.

# carcinogen [car-sin-o-jin]

Any substance that causes cancer, or helps cancer grow.

# carcinoid syndrome [car-sin-oyd sin-drom]

A group of symptoms produced by carcinoid tumors that release large amounts of hormones, which cause facial flushing, wheezing, diarrhea, a fast heartbeat, and other symptoms.

# carcinoid tumor [car-sin-oyd]

Tumors that develop from neuroendocrine (nerve and endocrine) cells. They can release certain hormones which can cause symptoms such as facial flushing, wheezing, diarrhea, and a fast heartbeat.

# carcinoma [car-sin-O-ma]

A cancer that begins in the skin or the lining layer (epithelial cells) of organs.

# carcinoma in situ [car-sin-O-ma in sy-too]

An early stage of cancer when the tumor is confined to the organ where it first developed. The disease has not invadema4()Tls. Tscinogen

# causal association or causal link [kaw-zul]

A relationship in which one factor is thought to be responsible for or cause an outcome; for instance, smoking has a causal link to lung cancer.

#### CDH1

A mutation in this gene can cause hereditary diffuse gastric cancer (a rare type of stomach cancer) to develop at an early age. Women who inherit changes in this gene also have a higher risk of lobular breast cancer.

#### cell

The basic building unit of all living things. Cells replace themselves by splitting and forming new cells (this process is called **mitosis**). The processes that control the formation of new cells and the death of old cells are disrupted in cancer.

# cell cycle

The series of steps that a cell must go through to divide; some chemotherapy drugs work by interfering with the cell cycle.

# centimeter [SIN-tuh-me-ter]

also written as **cm**.Metric measure of length, 1/100 of a meter. It takes about 2½ cm to equal 1 inch. See also **meter**, **millimeter**.

# cerebrospinal fluid [suh-REE-bro-spy-nuhl]

A special clear liquid that surrounds and cushions the brain and spinal cord. Also called **CSF.** 

#### cGy

See Gray under radiation dose.

#### chaplain

A member of the clergy who helps manage the spiritual needs of the patient and family and can usually address many denominations, faiths, and beliefs.

#### CHEK2

A gene that if damaged or mutated, can increase the risk of breast and other types of cancer. A damaged CHEK2 gene can be inherited.

#### chemo brain [key-mo brain]

A mental change that can be defined as a decrease in mental "sharpness", inability to remember certain things, and having trouble finishing tasks, concentrating on something, or learning new skills. It can happen at any time during the cancer journey, before or after cancer treatment.

# chemoprevention [key-mo-pre-VEN-shun]

Using drugs, chemicals, or other substances to try and lower the risk of developing cancer or of cancer coming back.

#### chemotherapy [key-mo-THER-uh-pee]

The use of medicines to treat cancer. Chemotherapy may be given alone or with other treatments like surgery, radiation therapy, hormone therapy, targeted therapy, or immunotherapy. It can be given as an infusion, injection, or taken by mouth. Often called **chemo**.

# chromosome [KROM-uh-som]

Long strands of DNA that carry genes, the basic units of heredity. Most human cells have 23 pairs of chromosomes, one of each pair from the mother, the other from the father. Each chromosome can contain hundreds or thousands of individual genes.

#### chronic inflammatory bowel disease

See inflammatory bowel disease.

# chronic obstructive pulmonary disease (COPD) [kron-ick ob-struck-tiv PULL-muhnerr-ee]

Lung disease such as emphysema or chronic bronchitis, that harms the lungs and makes it harder to breathe. More common in people who smoke.

#### chyme [kime]

the thick, nearly liquid mixture of partly digested food and digestive juices found in the stomach and small intestine.

#### cirrhosis [seh-ROH-sis]

A disease in which liver cells become damaged and are replaced by scar tissue. People with cirrhosis have an increased risk of liver cancer.

#### Claus model

A tool used to help health professionals estimate a woman's breast cancer risk. It gives an estimate of breast cancer risk based on certain risk factors.

# clinical breast examination (CBE)

Often shortened to CBE. Examination of the breasts done by a health professional such as a doctor or nurse to check for lumps or other changes.

# clinical nurse specialist (CNS)

An advanced practice registered nurse (APN or APRN) with a master's or doctoral degree and special certification who works closely with the entire care team, and has advanced training and clinical experience in a certain area of medical and nursing practice. Oncology CNSs have many different roles, such as direct patient or family care, supervising staff, nursing research related to cancer patients, or teaching about cancer, treatment, and side effects.

# clinical stage

See **stage**.

#### clinical trials

Research studies that use human volunteers to test new drugs or other treatments to compare current, standard treatments with others that may be better. They may also test new ways to diagnose or prevent a disease.

#### colectomy [kuh-lek-tuh-me]

surgery that removes all (*total colectomy*) or part (*partial colectomy* or *hemicolectomy*) of the colon. See also **colon**, **bowel**, **colostomy**, **segmental resection**, **anastomosis**.

#### colitis [kuh-lie-tis]

a general term for inflammation of the large intestine (colon). Colitis can be intermittent

(it comes and goes) or chronic (long-lasting, as in ulcerative colitis). See also

cancer research, this group most often gets standard treatment (which has already been tested and is in general use). If no standard treatment exists, the control group may get a **placebo** or sham treatment. Most cancer clinical trials do not use placebos unless they are given along with an active drug. It's unethical to give someone a placebo instead of a treatment that's known to work. Also sometimes called the **comparison group**.

#### conventional therapy or treatment

See standard therapy.

#### cord blood transplant

The use of stem cells in blood that has been taken from the placenta and umbilical cords of newborns to replace the blood-forming stem cells in patients whose own stem cells have been destroyed by radiation or chemotherapy.

# core needle biopsy

A procedure used to get tissue samples. The needles are wide and remove a small cylinder of tissue. A pathologist looks at these samples with a microscope to see if cancer cells are present.

#### corticosteroid [kor-tih-ko-STEER-oyd]

Any of a number of steroid substances that come from the cortex (outer layer) of the adrenal glands. They are sometimes used as cancer treatments or to reduce nausea. They are also used to relieve pain in patients with cancer in the bone.

# cranium [cray-nee-um]

The bones that form the head. The part of the skull bones that enclose and protect the brain, and support the structures of the face.

#### Crohn's disease or Crohn's colitis [kronz]

A type of chronic inflammatory bowel disease. In this condition, the small bowel or, less often, the colon is inflamed over a long period of time. This increases a person's risk of developing colon cancer.

# cryoablation [cry-o-ah-BLAY-shun]

The use of extreme cold to freeze and kill cancer cells. Also called **cryosurgery** or **cryotherapy**.

cryosurgery [cry-o-SUR-juh-ree]

See cryoablation.

cryotherapy [KRY-oh-THAYR-uh-pee]

See cryoablation.

CT colonography

See virtual colonoscopy.

#### CT scan, CAT scan, or computed tomography scan [toe-mahg-ruh-fee]

An imaging test that takes many x-rays from different angles. These images are combined by a computer to make 3-dimensional (3-D) pictures of internal organs and tissues. CT scans can help doctors find cancers, show things like a tumor's shape and size, or find out how well treatment is working.

# CT-guided needle biopsy

A biopsy procedure that uses a CT scan to help the doctor advance a biopsy needle toward a suspicious area or mass. The images are repeated until the doctor is sure the needle is in the tumor or mass. Tissue is then taken from it and looked at with a microscope.

# curative treatment [kur-uh-tiv]

Treatment aimed at completely getting rid of the cancer so that no more treatment is needed, and the cancer is not expected to come back.

#### cyst [sist]

Pockets of tissue that can form anywhere in the body and may be filled with fluid, air, or pus. Cysts are usually not cancer.

# cystoscopy [sis-tah-skuh-pee]

A procedure that looks at the inside of the urethra and bladder with a thin, flexible,

# lighted tube called a cystoscope

# cytogenetics [sy-toe-juh-NET-icks]

Tests that look for abnormal changes (mutations) in chromosomes by testing samples of tissue, bone marrow, or blood in a laboratory Changes in certain chromosomes can be a sign of some types of cancer or genetic diseases.

#### cytokine [sy-toe-kine]

A substance that is made by cells of the body's immune system that can affect the immune response. Cytokines can also be made in the lab and given to people to help the body's immune responses against cancer. See also **immune system**.

# cytology [sy-tahl-uh-jee]

The study of cells using a microscope. Also refers to tests to diagnose cancer and other diseases by looking at cells under a microscope.

# **Dcytology**

#### diabetes [dai-uh-bee-teez]

A condition that affects how the body turns food into energy. When a person has diabetes, the body does not make enough insulin or use it the way it should. This causes too much sugar to stay in the blood.

#### diagnosis [die-ug-NO-sis]

Identifying a disease or condition by its signs or symptoms, and by using imaging tests, lab tests, or biopsy.

#### diaphragm [DIE-uh-fram]

A dome-shaped muscle that separates the chest from the abdomen (belly). The diaphragm moves down to pull air into the lungs, and up to push it out.

# dietary supplement

A product, such as a vitamin, mineral, or herb, that is added to the diet with the intention to improve health, and not to diagnose, treat, cure, or prevent disease. Because dietary supplements are not legally considered drugs, their manufacturers can sell them without having to prove they are safe or effective.

# diethylstilbestrol or DES [die-ETH-ul-still-bes-trahl]

A man-made form of estrogen prescribed to some pregnant women between 1938 and 1971 to help prevent miscarriages or premature deliveries. It can increase risk of certain cancers for anyone who was exposed to it during gestation (as an embryo or fetus if the mother took it during pregnancy). Women who took this drug while pregnant may be at a slightly higher risk of breast cancer. It is no longer available in the United States. Also known as **DES**.

# dietitian or registered dietitian [die-uh-TISH-un]

An expert in the area of nutrition, food, and diet who has passed a national board exam. Many RDs specialize in areas like weight management, exercise science, cancer care, or cardiac rehabilitation. See also **nutritionist**.

#### differentiation [dif-uhr-en-she-A-shun]

The process through which cells mature so they can do the jobs they were meant to do. It describes how much or how little cancer cells look like the normal tissue they came

from. Cancer cells that are well-differentiated look more like normal cells and tend to grow and spread more slowly than poorly differentiated or undifferentiated cancer cells.

#### digital mammography

A way of storing an x-ray picture of the breast as a computer image rather than on the usual x-ray film. Also called **3D mammogram**.

#### digital rectal exam (DRE)

An exam in which the doctor puts a lubricated, gloved finger into the rectum to feel for anything that isn't normal. This simple test, which is generally not painful, can find some prostate and rectal cancers. Also called **DRE**.

# dihydrotestosterone or DHT [die-hi-dro-tes-TOSS-ter-own]

A male hormone made from testosterone. High levels of dihydrotestosterone may increase the growth of prostate cancer and might make it harder to treat. Also called **DHT** 

# dilation and curettage or D & C [die-lay-shun and cure-uh-TAZH]

A procedure in which the cervix is opened slightly (dilation) so that tissue from the lining of the uterus (womb) can be removed (curettage). This is often used to get tissue for biopsy. In some cases, all of the contents of the uterus are removed. Also called a **D** & **C**.

#### dimpling

A pucker or indentation of the skin. Dimpling on the breast might be a sign of cancer.

#### discharge

Fluid that comes out of a part of the body.

# discharge coordinator or planner

Often a nurse or social worker who helps make sure patients leaving the hospital have what they need to continue their recovery at home. They also may help a patient find other places to go after leaving the hospital, such as a nursing home or rehab, where they can continue to get the care they need.

#### disease-free survival rate

The percentage of people with a certain cancer who are still living and have no evidence of cancer at a certain period of time (usually 5 years) after treatment.

# dissection [di-sek-shun]

Surgery to divide, separate, or remove tissues.

#### distal

A term used to refer to a part of the body (usually a limb) located further away from the torso than another part. Ex: the knee is distal to the hip or the ankle is distal to the knee.

#### distant cancer

Cancer that has spread far from its original location or primary site to distant organs or

A doctor with a licensing and educational background much like that of a medical doctor (MD) who is specially trained to use a "whole person" approach to medicine rather than just treating specific symptoms. See also primary care physician.

#### dorsal

Relating to the back side of the body or body part.

#### dose-dense chemotherapy

Giving the usual doses of chemo with less time between treatments than in a standard treatment plan. For people with some types of cancer, this may lower the chance that the cancer will come back. This approach can lead to more side effects and be harder to take, so it's not an option for everyone.

# dosimetrist [doe-sim-uh-trist]

A person with special training and certification who calculates and plans the correct dose of radiation therapy (the amount, rate, and how the dose is spread out) for cancer treatment and/or other diseases.

#### doubling time

The time it takes for a cell to divide or for a group of cells to double in size. Cancer cells vary in doubling time. A cancer might be present for many years before it can be found.

#### drug resistance

When cancer cells or other microorganisms are not affected by the drugs used to destroy them.

#### durable power of attorney for health care

A legal document in which you appoint a person to make all your health care decisions for you if you berson td2 489.pl 0 1 4 Imheaerg ET BdtS131isr|n5stMl1sh(rrg 0roach can lead to more

Abnormal changes of groups of cells within a tissue or organ. Dysplasia is not cancer, but the abnormal changes may sometimes lead to cancer.

#### Ε

#### early detection

Finding disease at an early stage, when it is easier to treat, before it has grown large or spread. Certain tests are used before a person has any symptoms to try to find cancer early.

# edema [uh-deem-uh]

Build-up of fluid in tissues, causing swelling.

#### efficacy [EF-ih-kuh-see]

Effectiveness. The ability of a treatment to produce the desired result.

#### ejaculate [ih-JACK-you-late]

To release semen during male orgasm.

#### electrocoagulation or electrofulguration [e-lek-tro-ful-ger-A-shun]

A type of treatment that destroys cancer cells by burning with an electrical current. Also known as **electrocautery**.

#### embolization [em-buh-li-ZAY-shun]

Treatment to block or reduce the blood supply to the cancer by injecting materials to block the artery that supplies blood to the tumor.

#### emesis [em-eh-sis]

Vomit or vomiting.

# endocavitary radiation therapy [end-oh-KAV-uh-terr-ee]

# endocrine glands [en-duh-krin]

Organs that release hormones into the bloodstream. The ovaries, testicles, thyroid, and adrenals are all examples of endocrine glands.

# endocrine therapy [en-duh-krin]

Manipulation of hormones to treat a disease or condition.

# endocrinologist [en-duh-kruh-NAHL-uh-jist]

Breast cancer cells without these receptors (called **estrogen-receptor negative** or **ERnegative**) are unlikely to respond to hormone therapy. **Estrogen-receptor positive** cancers are more likely to respond to hormone therapy.

#### estrogen therapy

See menopausal hormone therapy.

#### etiology [ee-tee-AHL-uh-jee]

The cause of a disease. There are many possible causes of cancer. Research is showing that both genetics (genes passed on from your parents) and lifestyle (including exposures to carcinogens) are major factors in many cancers.

#### excision [ex-sih-zhun]

Removal by cutting the body (surgery). This can mean cutting out a tumor or cutting off a body part.

# excisional biopsy [ex-sih-zhun]

Surgery that cuts through the skin to remove an entire tumor so that it can be looked at in the lab for cancer.

#### explanation of benefits

A document from the health insurance company that explains what part of a medical or health claim was paid and/or what was not.

#### external beam radiation therapy

Radiation from a source outside the body that is focused on the cancer. It is much like getting an x-ray, but for a longer time. Also called **EBRT**. Compare to brachytherapy.

#### F

# false negative

Test result implying a condition does not exist when in fact it does.

#### false positive

**American Cancer Society** 

The part of plant carbohydrates such as fruits, vegetables, whole grains, and legumes that can't be digested. Beans, vegetables, whole grains, and fruits are examples of good sources of fiber. Links between fiber intake alone and risk of cancer are not proven, but eating these foods is still recommended because they contain other §86\$tange/\$36\$667229\$6700psteventebasefruitTorelpatsurhesibertofenlateath transfitores togestwory cju

# fibrocystic changes [fie-bro-SIS-tick]

Changes in the braej8 Tm 0 may het

The percentage of people with the same type and stage of cancer who are alive 5 years or longer after diagnosis. A five-year survival rate can't tell how long a person will live but may help give them a better understanding of how likely it is that treatment will be successful.

#### flow cytometry [sy-tahm-uh-tree]

Test of a sample of cells from a biopsy, cytology specimen, or blood specimen by using special antibodies and a laser beam. It is commonly used to find out the exact type of leukemia or lymphoma a person has. It can also be used to measure the amount of DNA in cancer cells.

# fluorescent in situ hybridization or FISH [floo-res-uhnt in sy-too hi-brid-ih-ZAY-shun]

A test that can help look at chromosomes in cells and tissues. It uses special fluorescent dyes that only attach to certain parts of chromosomes and can find specific deoxyribonucleic acid (DNA) sequences. It can be used to diagnose, to evaluate prognosis (disease outlook), or to look at the remission of a disease. also called **FISH**.

#### follicle [fah-lick-uhl]

A sac or pouch-like structure. There are many types and sizes of follicles in the body; for example, in the scalp, one follicle contains one hair. In the ovary, one follicle contains one egg.

#### follicular [fah-lick-yuh-ler]

Relating to a follicle or follicles. In medicine, might refer to a type of cell in an organ, or to a type of cancer that starts in these follicular cells. .

#### fracture [frack-chur]

A partial or complete break, usually in bone.

#### frozen section

A very thin slice of body tissue that has been quick-frozen for the pathologist to look at with a microscope while the patient is still in surgery. This method is sometimes used when information about a tissue sample is needed during surgery to make immediate decisions. The diagnosis is confirmed in a few do 7d1 1e sample is needed during 0 0in surtcr-ci

# full body CT scan

A radiology test that scans the body from the chin to below the hips. This is done to look for early signs of disease in people who have no symptoms. There are currently no

# genetic counseling

The process of talking to people who might have a gene that makes them more likely to develop a disease. This is usually done by a specially trained health care professional. The purpose of counseling is to explore the genetic risk, if genetic tests are needed, what the genetic test results might mean, help them decide whether they wish to be tested, and support them before and after the test.

# genetic counselor

males.

# glands

A cell or group of cells that make and release substances to be used by the body or sent outside of it. The sweat glands are examples of organs that make and release substances.

# glandular tissue [glan-juh-luhr tish-oo]

Tissue that makes and secretes substances such as breast milk, semen, sweat, saliva, and others. Glandular tissue is present in many organs, including the colon, stomach, pancreas, lungs, and cervix.

# Gleason grade

A number between 1 and 5 that describes how much cancer cells in the prostate look like normal prostate cells. Those that look a lot like normal cells are graded 1, while those that look the least like normal cells are graded 5.

#### grade

The grade of a cancer tells how much the cancer cells look like normal cells. A low-grade number usually means the cancer cells look more like normal cells and are slower-growing and less likely to spread. A high-grade number means the cancer cells look less like normal cells and are faster-growing and more likely to spread.

# graft-versus-host disease (GVHD)

A condition that results when the immune cells from a donor (usually a bone marrow or other type of stem cell transplant) attack the tissues of the person receiving the transplant.

## gray (Gy)

A unit for measuring radiation.

#### growth factors

Naturally occurring proteins that make cells grow and divide. Too much growth factor production by some cancer cells helps them grow quickly. New treatments to block these growth factors are being tested in clinical trials. Other growth factors are

sometimes used to help normal cells recover from side effects of chemotherapy.

# guaiac [gwi-ack]

A substance in the fecal occult blood test used to check for blood in a person's stool.

# gynecologic oncologist [guy-nuh-kuh-LA-jik on-kahl-uh-jist]

A doctor who specializes in cancers of the female sex (reproductive) organs.

# gynecologist [guy-nuh-KAHL-uh-jist]

A doctor who specializes in female health issues, including sexual and reproductive function and the diseases of their reproductive organs, except diseases of the breast

Bright red blood in the stool.

# hematocrit [he-mat-uh-krit]

The percentage of red blood cells in the blood. A hematocrit test can be used to check for conditions like anemia.

# hematologist [he-muh-TAHL-uh-jist]

A doctor who specializes in blood disorders (also called blood dyscrasias), including cancers of the blood and blood-forming tissues.

# hematoma [he-muh-TOE-muh]

A collection of blood outside a blood vessel caused by a leak or an injury. A bruise is an example of a hematoma.

# hematuria [he-muh-TUR-ee-uh]

Blood in the urine.

# hemoglobin [HE-muh-glo-bin]

The part of the red blood cell that carries oxygen. Hemoglobin levels can get very low in people with cancer, especially during certain kinds of treatment.

# hemorrhoids [hem-uh-royds]

Painful, swollen veins in the anus that might bleed.

# hepatitis [hep-ah-tie-tis]

# HER-2 or human epidermal growth factor receptor 2

A protein that is found in higher amounts in some cancers (HER-2 positive). Cancers that are HER-2 positive tend to grow faster and spread more than those that are HER-2 negative. Also called **HER2** or **HER2/neu**.

# hereditary cancer syndrome

A condition in which inherited changes in genes cause a person to have a higher than normal risk for certain types of cancers.

# hereditary non-polyposis colon cancer (HNPCC) [huh-RED-ih-ter-ee non-pah-lih-PO-sis]

An inherited condition that greatly increases a person's risk for developing colorectal cancer, as well as endometrial cancer (cancer of the lining of the uterus), ovarian cancer, stomach cancer, small bowel cancer, and cancer of the lining of the kidney or the ureters. People with this condition tend to develop cancer when they are young without first having many polyps. Also called **Lynch syndrome**.

# hesitancy

Trouble starting to urinate or continuing urination after it starts.

# heterogeneous [HEH-teh-roh-JEE-nee-us]

Having different parts or elements (ex; cells or tissues that don't look alike).

## high risk

When the chance of developing a disease such as cancer is much greater than that normally seen in the general population.

# high-dose rate (HDR) or temporary brachytherapy [brake-ee-THER-uh-pee]

A form of radiation treatment where a radioactive source is placed in or near a cancer for a short period of time then removed. Also called **HDR brachytherapy**.

# histology [hiss-tah-luh-jee]

The study of cells or tissues with a microscope.

#### home health nurse

A nurse who provides care in the patient's home, including teaching about and giving medicines and certain treatments, and checking to see if the patient needs other medical care.

# homogeneous [home-uh-JEE-ne-us]

Cells or tissue that look the same throughout.

#### hormone

Proteins or substances made by glands in the body that help control how certain types of cells and organs work.

# hormone receptor

A protein in or on a cell that binds to a certain hormone and changes the cell's ability to grow.

# hormone receptor assay

A test used to see if a breast tumor is likely to be affected by hormones or if it can be treated with hormones.

# hormone replacement therapy (HRT)

See menopausal hormone therapy.

#### hormone therapy

Cancer treatment using medicines that block or alter hormones to help kill or slow the growth of cancer cells that depend on hormones. Also known as **endocrine therapy**.

## hormone-dependent

Any cancer that depends on hormones for growth, such as some breast and prostate cancers.

## hormone-refractory

No longer responding to hormone treatments.

## hospice

A special kind of care for people in the final phase of an incurable illness. Hospice focuses on quality of life for people and their caregivers who are experiencing an advanced, life-limiting illness.

# hospice care specialists or team

Doctors, nurses, other health care professionals, social workers, chaplains, counselors, and trained volunteers who work together in a patient and family-centered approach. The work of a hospice team focuses on the physical, emotional, or spiritual needs of patient who is nearing the end of life and is no longer in active treatment for a serious illness.

# hospitalist

A doctor who works only in a hospital.

#### hot flush or hot flash

Sudden feeling of facial or body warmth, along with flushing of the skin and sweating. Caused by hormone changes of menopause or certain types of cancer treatment.

# HPV or human papillomavirus [pap-uh-LO-muh vy-rus]

A large group of related viruses, some of which can cause cancer. Also called **human papilloma virus**.

# HPV test or human papillomavirus test [pap-uh-LO-muh vy-rus]

Screening test used to look for cervical cancer before any symptoms occur. Might be used alone (primary HPV test) or combined with a Papanicolaou (Pap) test (co-testing).

# hyperalimentation [hi-per-al-ih-men-TAY-shun]

Liquid nutrition given into a vein (intravenously or IV).

## hyperplasia [hi-per-PLAY-zhuh]

Benign overgrowth of cells. Also known as **hyperplastic**.

## hypertension [hi-per-TEN-shun]

High blood pressure.

# hyperthermia [hi-per-THERM-ee-uh]

Higher body temperature than normal. Also used to describe treatments that use carefully controlled heat for medical purposes.

# hysterectomy [hiss-ter-EK-tuh-me]

An operation to remove the uterus.

I

# image cytometry

Lab test that uses dyes that react with DNA and computers to measure the amount of DNA in cells.

# imaging studies

Methods used to make pictures of internal body structures. Some imaging tests used to help diagnose or stage cancer are x-rays, CT scans, magnetic resonance imaging (MRI), PET scans, and ultrasound.

# immune system

Cells, tissues, and organs that work together to help find and attack germs that invade the body and cause infections. The immune system may also help find some cancers.

# immunocytochemistry [im-yuh-no-sy-toe-KEM-iss-tree]

Lab tests that use antibodies to look for specific proteins on individual or small numbers of cells.

## immunology [im-yuh-NAHL-uh-jee]

Study of the immune system and how the body resists infection and certain other diseases.

# immunosuppression [im-yuh-no-suh-PREH-shun]

When the immune system is weak. This condition may be present at birth, or it may be

caused by cancer, or cancer treatments (such as chemotherapy and radiation). It leads to a greater risk of infection.

# immunotherapy [im-yuh-no-THER-uh-pee]

Treatments that use the body's immune system to fight cancer by boosting or changing how the immune system works so it can find and attack cancer cells.

# implant

An artificial device or tissue inserted into the body, such as breast implants during reconstructive surgery or radiation implants (internal radiation) to treat a cancer. Also to fix or set securely or deeply in place.

# impotence [im-puh-tense]

Not being able to have or keep enough of an erection of the penis for penetration. Also called **erectile dysfunction (ED)**.

# in situ [in sy-too]

In place; localized and confined to one area. Not considered cancer but can increase the risk of cancer developing later.

# incidence [in-sih-dens]

The number of new cases of a disease in a certain period of time.

## incidence rate [in-sih-dens rate]

The number of people with a disease (such as cancer) divided by the number of people at risk for the disease over a certain time period. Incidence rates may look at a specific group of people (such as people aged 65 and older). Incidence rates are usually reported as a number of people who get a disease per 100,000 people.

# incision [in-sih-zhun]

A cut in the skin or other tissues made during surgery.

# incisional biopsy

A cut through the skin to remove a part of a tumor so that it can be looked at in the lab

to see if there is cancer in the tumor.

#### inconclusive

Uncertain finding. A result that cannot say for certain whether a disease, condition, or gene mutation is present; neither positive nor negative.

# incontinence [in-kon-tuh-nence]

Partial or complete loss of urinary or bowel control.

#### inferior

An anatomical term that means below another part of the body or toward the feet.

# infertility

Inability to conceive a child after 12 or more months of regular sexual activity, or after 6 months if the woman is more than 35 years old. This can be the result of certain types of cancer treatment.

# inflammatory bowel disease (IBD)

A chronic condition (either ulcerative colitis or Crohn's disease) in which the colon is inflamed over a long period. IBD increases a person's risk of colorectal cancer.

# informed consent [in-FORMD kun-SENT]

A process of communication between a person and their health care provider to provide a full explanation of the procedure or treatment, and the possible risks, benefits, and possible alternatives, including answering all questions and concerns. This process helps ensure that the person fully understands the procedure or treatment before agreeing to it.

## infraclavicular [in-fruh-kluh-VICK-yuh-ler]

Below the collar bone (clavicle).

## ingest [in-jest]

To take in to the body by eating, drinking or absorbing it.

#### inherited disease

Illness that a person is at higher risk for because of a gene mutation passed from their parents at conception.

# inpatient

A person whose treatment requires them to stay in the hospital.

# integrated PET/CT

A scan that combines the detailed image of the CT with the ability to detect areas of increased cell activity.

# integrative therapy

The combined use of standard medical treatments and certain complementary methods, most often to relieve the symptoms of cancer and side effects of treatment.

# interferon [in-ter-FEAR-on]

A natural chemical produced by cells that helps regulate the body's immune system, boosting activity when there is a threat, like a virus or cancer. Lab-made Interferons are used to treat some types of cancer.

# interleukins [IN-ter-loo-kins]

A group of proteins (cytokines) that act as chemical signals between white blood cells making them do their assigned job.

#### intermittent hormone therapy

Hormone therapy given in an on-again, off again approach.

# interstitial radiation therapy [in-ter-STIH-shul]

Internal radiation treatment (brachytherapy) that puts a radioactive implant into the tissue in or near the tumor.

## intracavitary radiation therapy

Radiation treatment in which the radioactive source is placed in a body cavity (space)

such as the rectum or uterus.

# intramuscular (IM)

Injected into a muscle.

# intraoperative ultrasound

A procedure done using sound waves (ultrasound) inside the body after surgery has started. The sound waves make pictures on a computer. For example, the probe can be placed on the surface of the liver to see if cancer has spread inside it.

# intravenous (IV) [in-truh-VEEN-us]

A method of giving fluids and medicines through a needle or a thin tube (called a **catheter**) that is put into a vein.

# intravenous pyelogram (IVP) [in-truh-VEEN-us pile-uh-gram]

A kind of x-ray procedure that uses a special dye to look at the structure and function of the urinary system (ureters, bladder, and kidneys).

#### invasive cancer

Cancer that has grown into nearby tissues.

# investigational

Being studied. Often used to describe medicines or other treatments being studied in clinical trials that are not yet available to the general public.

J

K

# **Kegel exercises**

Exercises to strengthen the muscles in the floor of the pelvis. These exercises may help improve muscle strength and bladder control.

L

# lactation [lack-tay-shun]

Production of milk in the breast.

# laparoscope [LAP-uh-ruh-scope]

A narrow, lighted tube with a small camera at the end put into the body through a very small cut in the body. Lets the surgeon see organs and lymph nodes inside the body. The lymph nodes or organs can then be removed using special surgical instruments put into the body through small incisions.

## laparoscopic surgery [lap-uh-ruh-SKAH-pick]

Surgery using a narrow lighted tube with a camera and special long instruments inserted through several small incisions in the body.

# laparoscopy [lap-uh-RAHS-kuh-pee]

Examination of a body cavity with an instrument called a laparoscope.

#### lateral

Away from the middle of the body.

# laxative [lack-suh-tiv]

A medicine that helps make stool (feces) easier to pass (promotes defecation) to prevent or treat constipation. Laxatives work in different ways; for example, by pulling fluid into the intestine or irritating the bowel to stimulate movement. Others add bulk

# leukocyte [LOO-ko-site]

White blood cell.

# leukocytosis [loo-ko-sy-TOE-sis]

Having more than the usual number of white blood cells.

# leukopenia [loo-ko-PEE-nee-uh]

A decrease in the white blood cell count, common in people with cancer, and often a side effect of chemotherapy.

# leukoplakia [loo-ko-PLAY-key-uh]

White patches on the tonguee7ccsralde efe to.s 0 0tos ATn te aan a

# lobectomy [low-bek-tuh-me]

Surgery to remove a lobe of an organ – usually the lung.

#### local anesthesia

See anesthesia.

# local excision [lo-kul eck-si-zhun]

Surgery to remove small superficial (surface) cancers, such as on the skin or in the colon or rectum.

#### local recurrence

brachy1 12 Tf 0 0 0 r BT 1 0 0 1 72 6al excision See **recurrence**.

## local therapy

Treatment that focuses on the site of the cancer, so that the rest of the body is not affected. Surgery, radiation, topical treatments, and cryotherapy are examples of local therapy.

#### localized cancer

A cancer that is just in the organ where it started; that is, it has not spread to other parts of the body. Also called **local cancer**.

low-dose CT sj 0p1el445712/GS2252 gs 0 rg /GS sgcreening te si0 r starchj 00 0r3 ggntments a

even years after treatment and can be a life-long problem.

lymphocyte [limf-o-site]

A type of white blood cell that helps the body fight infection.

lymphokine [limf-o-kine]

See cytokine.

lymphovascular invasion

Any sort of lump or abnormal growth of tissue, which may or may not be cancer.

#### medial

An anatomical term that means toward the center of the body.

# mediastinoscopy [me-dee-uh-stine-AH-skuh-pee]

Examination of the mediastinum (tissues, organs, and lymph nodes between the lungs) using a thin, flexible tube with a light, small video camera and cutting tool on the end inserted under the chest bone (sternum). This lets the doctor see the lymph nodes in this area and remove samples in this area to check for cancer.

# mediastinum [me-dee-uh-STY-num]

The area behind the breastbone and between the lungs.

## medical oncologist [med-ih-kullon-kahl-uh-jist]

A doctor who specializes in diagnosing and treating cancer with chemotherapy and other drugs. A medical oncologist is different from a surgical oncologist, who mostly treats cancer with surgery.

## medical power of attorney

See durable power of attorney for health care.

menarche [men-ar-key or men-ar-key]

Cancer cells that spread from the primary site where they started to other parts of the body through the lymph system or bloodstream.

# metastasize [ meh-TAS-tuh-size]

The spread of cancer cells from where the cancer started (primary site) to one or more sites elsewhere in the body, often by way of the lymph system or bloodstream.

# metastatic [meh-tuh-STAT-ick]

A way to describe cancer that has spread from the primary site (where it started) to other structures or organs in the body.

## microcalcifications

See calcifications.

# micrometastases [mike-row-muh-TAS-tuh-sis]

Area of cancer spread that is less than 2 mm (less than 1/10 of an inch).

microsatellite instability [my-crow-SAT-uh-lite in-stuh-BILL-uh-tee]

# mucositis [mew-ko-site-us]

Inflammation of a mucous membrane, such as the lining of the mouth.

#### mucous membrane

The moist inner lining layer of some organs and body cavities, such as the mouth, throat, nose, vagina, and digestive system. Also called **mucosa**.

# mucus [mew-kus]

The thick, slippery fluid secreted by mucous glands.

# multi-cancer early detection tests (MCED)

Tests that look for pieces of DNA, RNA, or proteins in a person's blood that might be signs of cancer. MCED tests may help find some types of cancer early, but these tests are still new, and there are questions that still need to be answered to determine how useful they might be in screening for cancer.

# multi-drug resistance (MDR)

When cancer cells change in ways that make anti-cancer drugs less effective.

# multiple sclerosis [MUL-tih-pul skleh-ROH-sis]

A disease that occurs when the immune system attacks nerve fibers in the brain and spinal cord leading to symptoms like weakness, numbness, tingling, and vision and problems.

# muscularis mucosae [mus-kyu-LAIR-is myoo-ko-say]

the inner muscle layer of the digestive tube (intestine) that is between the mucosa and the submucosa. See also **colon**, **colon wall**.

## muscularis propria [mus-kyu-LAIR-is pro-pree-uh]

the muscle layer that covers most parts of the intestine (digestive tube). This layer is furthest away from the center of the tube. Moving outward from the opening, the muscularis propria is beneath the *submucosa*. Beyond the submucosa is a thin layer of tissue called *subserosa*, which covers the colon but not the rectum. See also **colon**, **colon wall**, **intestine**, **rectum**.

# mutation [mew-tay-shun]

Abnormal changes in a gene (pieces of DNA) that tell cells what to do and when to grow and divide). Most mutations do not cause cancer, but all types of cancer are thought to be due to gene mutations.

# myeloablative treatment [my-uh-lo-uh-BLAY-tiv]

treatment to wipe out the bone marrow before a bone marrow or stem cell transplant. See also bone marrow, hematopoietic stem cell transplant, conditioning treatment.

# myeloid leukemia [my-uh-loid loo-key-me-uh]

also called myelocytic leukemia,myelogenous leukemia,or non-lymphocytic leukemia. A type of cancer that starts in the cells that are supposed to mature into different types of blood cells. Myeloid leukemia can be *chronic* (CML) or *acute* (AML). There are a number of subtypes of acute myeloid leukemia, some with genetic abnormalities that can affect the outlook for successful treatment. See also leukemia, non-myeloid cancers.

# Ν

# naturopathic doctor (ND)

A doctor who is not a medical doctor (MD) but is trained to use therapies that focus on supporting a person's self-healing abilities. Education and licensing of NDs varies by state.

## necrosis [nuh-crow-sis]

The death of one or more cells of the body. Necrotic refers to tissue that has died.

# needle aspiration [need-ul asp-er-A-shun]

To draw out a liquid, gas, or tissue fragments using suction. In this procedure, a needle is used to reach the cyst or tumor, and with suction, draw up (aspirate) samples to be looked at under a microscope.

# needle biopsy [need-ul by-op-see]

Removal of fluid, cells, or tissue with a needle so that it can be looked at with a

# nephrologist [neh-frahl-uh-jist]

A doctor who specializes in kidney (renal) diseases.

# neuropathy [nur-ah-puth-ee]

See peripheral neuropathy.

# neurosurgeon [nur-o-SUR-jun]

A doctor who specializes in operations involving the nervous system, including the brain, spinal cord, or nerves.

# neutropenia [new-trow-PEEN-ee-uh]

A decrease in the number of **neutrophils** (white blood cells that defend against most types of infection) in the blood. The lower the number of neutrophils and the longer it stays low, the greater the risk of infection.

# neutrophils [new-trow-fills]

A type of white blood cell that fights bacteria infections.

## nocturia [nok-toor-ee-uh]

Excessive urination during the night.

#### nodal status

Indicates whether the cancer has spread to lymph nodes (node-positive) or has not spread to lymph nodes (node-negative).

#### node

See lymph node.

## nodule [nod-yool]

A small, solid lump that can be felt. This term is sometimes used to refer to a small tumor seen on x-ray.

non-steroidal anti-inflammatory drugs [non-steer-OYD-uhl an-tie-in-FLAM-uh-tor-

# ee or an-tee-in-FLAM-uh-tor-ee]

Medications that reduce pain, inflammation and fever. Before you take any NSAIDs, ask your doctor, pharmacist, or nurse if it's safe for you to take it with your other medicines, and how long you can take it. Also called **NSAIDs**.

#### nuclear medicine

A branch of medicine that uses radioactive substances (radioisotopes) to diagnose and treat illnesses.

#### nuclear medicine scan

A method for finding tumors, seeing how much a cancer has spread, and checking to see if a treatment is working. Small amounts of a radioactive substance (called an **isotope**) are put into the bloodstream. The isotope collects in certain organs and a special camera is used to take a picture of the organ and show areas of disease.

## nucleus [new-klee-us]

The center of a cell where DNA is found and where it reproduces. Studying the size and shape of a cell's nucleus under the microscope can help pathologists tell cancer cells from non-cancer cells.

# nulliparous [nuh-lip-uh-rus]

Never having given birth to a child.

#### nurse anesthetist

A nurse with an advanced degree and training in giving drugs or other agents (like gasses) that cause a total loss of feeling or relieve pain, most often during surgery.

# nurse practitioner [nurs prak-tih-shun-er]

An advanced practice registered nurse (APN or APRN) with a master's or doctoral degree and special certification who works closely with a doctor, helps to diagnose and manage care, and has advanced training and clinical experience in a certain area of medical and nursing practice.

#### nutritionist

A title sometimes used interchangeably with dietitian, but educational requirements for nutritionists vary by state.

# 0

# obesity

A certain level of overweight; in general, a body mass index (BMI) greater than 30. BMI

# oncology [on-kahl-o-jee]

The branch of medicine concerned with the diagnosis and treatment of cancer.

# oncology clinical nurse specialist [on-kahl-o-jee]

A registered nurse with a master's degree in oncology nursing who specializes in the care of cancer patients. Oncology nurse specialists may prepare and give treatments, monitor patients, prescribe and provide supportive care, and teach and counsel patients and their families. See also **cancer care team**.

# oncology social worker [on-kahl-o-jee]

A person with a master's degree in social work who is an expert in coordinating and providing non-medical care to patients. The oncology social worker counsels and assists people with cancer and their families, especially in dealing with the non-medical issues that can result from cancer, such as financial problems, housing (when treatments are given at a facility away from home), and child care. See also **cancer care team**.

# oncoplastic surgery

Newer techniques that combine cancer surgery and plastic surgery techniques.

# ophthalmologist [off-thuhl-MAHL-uh-jist]

A doctor who specializes in eye diseases.

#### oral

Refers to the mouth. For example, medicines taken orally are taken by mouth. Oral cancer is cancer of the mouth.

# oral and maxillofacial surgeon [max-ill-o-FAY-shul]

A surgeon who specializes in surgery of the mouth, jaw, and face.

## oral contraceptives

Birth control pills, which contain estrogen and/or a progesterone-like substance, known as progestin.

# orthopedic surgeon [or-thuh-pee-dik]

A surgeon who specializes in diseases and injuries of the muscles, joint, and bones (the musculoskeletal system).

# osteoporosis [os-tee-o-puh-RO-sis]

Thinning of bones, causing weaker bones and a higher risk for fractures (breaks in the bones). Cancer treatments can also cause osteoporosis.

# ostomy [os-tuh-me]

A surgical opening made from inside the body to the outside, i.e., colostomy, ileostomy, tracheostomy, or urostomy. Also called a **stoma**.

# ostomy nurse

See enterostomal therapist.

# otolaryngologist [o-toe-lair-in-GOL-uh-jist]

A doctor who specializes in diseases and injuries of the ear, nose, and throat. Also called an ENT (which stands for ears, nose, and throat) or a head and neck doctor.

# outpatient

A person being treated without staying in the hospital. Compare to **inpatient**. See also **ambulatory**.

#### ova

Eggs (reproductive cells) released during a woman's reproductive (fertile) years. The egg must be fertilized by a sperm to grow into a baby. The singular of ova is ovum.

#### ovarian ablation

Treatment to lower or stop the production of estrogen by the ovaries, through removal of the ovaries, radiation therapy, hormonal therapy or other medicines.

#### P

#### p53

An important tumor suppressor gene that normally causes damaged cells to die. When this gene is not working properly, the risk of developing many types of cancer is increased.

# pain specialists

Doctors, nurses, and/or pharmacists who are experts in pain control. In many places there's a team of health professionals who are available to address pain issues.

# palliative care or treatment [pal-ee-uh-tiv]

Health care focused on improving quality of life by managing the symptoms of a serious

microscope. This is a common feature of some tumors of the ovaries, uterus, thyroid gland, and other organs.

# papilloma [PAP-uh-lo-muh]

A benign (not cancer) growth.

# pathologic stage

See **stage**.

## pathologist [path-all-uh-jist]

A doctor who specializes in diagnosing and classifying diseases by lab tests and by looking at tissues and cells with a microscope. The pathologist determines whether a tumor is cancer, and, if it is cancer, the exact cell type (where it started) and grade (how fast it likely will grow).

## patient or nurse navigator

A person who guides patients and their families through complex medical systems and helps them work with the rest of the cancer care team to overcome barriers to care that may come up so they can successfully complete their treatment. Navigators can be lay people with special training and experience or health care professionals, like nurses or social workers.

# pediatric oncologist [pee-dee-at-trick on-kahl-uh-jist]

A doctor who specializes in caring for children and teens with cancer (sometimes up to age 21).

## pediatrician [pee-dee-uh-TRISH-un]

A doctor who specializes in caring for children and teens, including preventing illness, providing primary health care, and treating of diseases.

# pelvic examination [pell-vick ex-am-in-A-shun]

An exam of a woman's uterus and other pelvic organs. It is used to help find cancers of the reproductive organs. The doctor will look at external structures and palpate (feel) the internal organs such as the ovaries and uterus.

cancer is present.

# PET scan or positron emission tomography [pahs-uh-trahn ee-mish-uhn tom-ahg-ruh-fee]

An imaging test that uses radioactive sugar to look for cancer cells in the body. Since cancer cells are more likely to take up larger amounts of sugar than normal cells, the test may be able to identify cancer versus normal cells. PET scans may be used to find tumors or see how well a tumor is responding to treatment.

# pharmacist (RPh or PharmD)

A licensed health professional who has at least a bachelor's degree in pharmacy. Pharmacists help to make sure treatments and medicines prescribed to patients are safe and effective. See also **Pain specialists** and **Palliative care specialists**.

# pharmacogenetics

Looks at how a single gene can change the way a person's body responds to medications or treatments.

# pharmacogenomics

Looks at a person's total genetic makeup to see what medicines and doses will work best for treatment.

# pheresis [fuh-ree-sis]

See apheresis.

photocoagulation or photoablation [foe-toe-ko-ag-yu-LAY-shun or foe-toe-uh-blay-shun]

A type of blood cell that helps stop bleeding by plugging up holes in blood vessels after an injury. Chemotherapy and radiation therapy can cause a drop in the platelet count, a condition called **thrombocytopenia**that carries a risk of excessive bleeding.

# pleurodesis [plu-rah-dis-sis or plur-o-DEE-sis]

A procedure to remove fluid that has built up between the lungs and the pleura and keep it from coming back by putting a substance between the layers to fuse them together.

# ploidy [ploy-dee]

Number of sets of chromosomes contained in a cell. Cancers with 23 pairs of chromosomes (the same as normal cells) are called **diploid(dip-**loyd) and those with either more or less than that amount are **aneuploid** (**an**-you-ployd).

# polycythemia vera [pah-lee-sy-THEME-e-uh vair-uh]

A chronic blood disorder in which the bone marrow makes too many red blood cells, white blood cells, and platelets. This leads to a higher concentration of hemoglobin with

A procedure that uses computed tomography (CT) and a dye injected into the portal vein of the liver. It takes cross-sectional x-rays of the veins to find cancer that may have spread from the colon or rectum.

# positive margin

See surgical margin.

# posterior [post-eer-ee-uhr]

The back or near the back of an organ or the body.

# poultice [pole-tiss]

Soft paste or thick liquid that is usually heated, applied to a cloth, and placed over an inflamed or painful area. Herbs, leaves, or foods are commonly used for this in folk medicine and home remedies.

#### pre-cancerous

Changes in cells that may, but do not always, become cancer.

# pre-malignant

See pre-cancerous.

## predisposition [pre-dis-puh-ZISH-un]

A higher likelihood of developing a certain disease. For example, people with certain mutations (changes) in their genes or a family history are more likely to get certain types of cancer.

## prevalence [preh-vul-uns]

The number of living people who have ever been diagnosed with cancer, including people diagnosed with cancer in the past and those who were recently diagnosed.

## prevention

The reduction of cancer risk by eliminating or reducing contact with things known to cause cancer, by changing conditions that contribute to cancer (such as obesity or lack of exercise), or by using medicines that interfere with cancer development. Lifestyle

changes, such as quitting smoking, for example, reduces the number of people who will get lung and other cancers.

## previvor

A person who has a higher risk of getting cancer but hasn't yet been diagnosed with cancer. Previvors are people who have an inherited gene (genetic) mutation, have a family history of cancer, or have other known risk factors.

## primary care physician or provider

The doctor a person would normally see first when a medical symptom or problem comes up. A primary care doctor could be a general practitioner, a family practice doctor, a gynecologist, a pediatrician, or an internal medicine doctor (an internist).

## primary HPV test

See HPV test or human papillomavirus test.

## primary site

The place where a cancer begins. Cancer is usually named after the organ in which it first starts. For example, cancer that starts in the breast is always breast cancer, even if it spreads (**metastasizes**) to other organs such as bones or lungs.

### primary treatment or primary therapy

coming back.

## progression

Spreading or growing disease, with or without treatment.

# prolactin

A hormone released from the pituitary gland that prompts the breasts to produce milk.

# proliferative [pro-lih-fer-uh-tiv]

## proximal

A descriptive term for a body part that is nearer to the center of the body than another part.

## **PSA density (PSAD)**

Determined by dividing the prostate-specific antigen (PSA) level by the prostate size. A higher PSAD indicates a greater likelihood of cancer.

## **PSA** doubling time (PSADT)

The length of time it takes for the prostate-specific antigen (PSA) level in the blood to double. This is sometimes useful in determining if prostate cancer is present or has come back (recurred).

## **PSA** or prostate-specific antigen

A protein made by the prostate gland that is found mostly in semen and a small amount in the blood. Blood tests for PSA levels may be used for prostate cancer screening, watching for changes in prostate cancer as part of observation or treatment, and checking to see if prostate cancer has come back after treatment is completed.

## **PSA velocity (PSAV)**

A measurement of how fast the prostate-specific antigen (PSA) level rises over time.

## psychiatrist [sy-ky-uh-trist]

A medical doctor specializing in the causes, treatment, and prevention of mental, emotional, and behavioral disorders. Psychiatrists provide counseling and can also prescribe medicines or other treatments.

## psychologist [sy-koll-uh-jist]

A health professional who has a graduate degree in psychology and training in clinical psychology. This specialist assesses a person's mental and emotional status and provides testing and counseling services to those who may have an emotional or mental health problem.

## psychosocial [sy-ko-SO-shul]

The psychological and/or social aspects of health, disease, treatment, and/or rehabilitation.

## **PTEN**

A gene that normally helps control cell growth. Inherited changes in this gene cause **Cowden syndrome**, a rare disorder in which people are at higher risk for both non-cancer and cancer breast tumors. It is also lingu .7togrowth.7gsla3 1tiv geract,non-

• rad (acronym for radiation absorbed dose) -- a basic unit of the amount of radiation absorbed by body tissue. The rad largely has been replaced by the gray measurement scale.

gray

A registered nurse who is an expert in the radiation therapy care of patients. This nurse may teach the patient about treatment before it starts and help manage any treatment side effects.

## radiocontrast dye [ray-dee-o-CON-trast]

Any material used in imaging studies such as x-rays, MRIs, and CT scans to help outline the body parts being examined. These may be injected into a vein or you could drink it. Some people can have reactions to radiocontrast dye so before the procedure, let your doctor and the technologist know if you have any allergies or have had a reaction to radiocontrast dye. Also called **dye, contrast dye, or radiocontrast medium**.

## radiofrequency ablation [ray-dee-oh-free-kwin-see uh-blay-shun]

Treatment that uses high-energy radio waves to heat and destroy abnormal tissues. Also called **RFA**. A thin, needle-like probe is guided into the tumor by ultrasound or computed tomography (CT) scan. The probe releases a high-frequency current that heats and kills cancer cells. RFA is sometimes used to treat tumors in the liver and is being studied for use in other areas of the body.

## radioisotope [ray-dee-oh-EYE-suh-tope]

An unstable compound that releases radiation energy as it breaks down. Radioisotopes are used in imaging tests to find cancer. They may also be used to treat cancer.

## radiologic technologist [ray-dee-uh-LAH-jick teck-nah-luh-jist]

A health professional who positions patients for x-rays and other imaging tests, takes the images, and then develops and checks the images for quality. The films taken by the technologist are then sent to a radiologist to be read.

## radiologist [ray-dee-AH-luh-jist]

A doctor with special training in diagnosing diseases by interpreting (reading) x-rays and other types of imaging studies that make pictures of the inside of the body.

## radionuclide bone scan [ray-dee-oh-NOO-klide]

See bone scan.

## radiopharmaceuticals [ray-dee-oh-farm-uh-SUIT-ih-kulz]

Drugs that include radioactive elements or radioisotopes. They are given into a vein (intravenously or IV) to treat certain cancers, such as thyroid, bone, and prostate cancer, as well as bone pain related to cancer that has spread to the bones.

## radiotherapy

See radiation therapy.

### randomized or randomization

A clinical trial process that uses chance to assign participants to different groups to compare treatments. Randomization means that each person has an equal chance of being in the treatment and control (comparison) groups. This helps reduce bias in the results that might happen, if, for example, the healthiest people all were assigned to a particular treatment group.

### re-excision

A second surgery to remove remaining cancer. This may be done if cancer cells were found at the edge of surgically removed tissue.

#### recurrence

When a cancer that was not detectable after treatment comes back. It may come back where it first started or in a different part of the body.

## red blood cells (RBCs)

Blood cells that contain hemoglobin, the substance that carries oxygen to all of the cells of the body. These cells are made in the bone marrow. Low red blood cell counts, a condition called**anemia**, are a common side effect of many cancer treatments.

## refractory [re-frack-tuh-re]

No longer responsive to a certain treatment.

## regimen [reh-juh-men]

A treatment plan that outlines the specific doses, schedule and length of treatment which may include different medicines as well as other methods such as radiation treatments.

## regional involvement or regional spread

The spread of cancer from its primary (original) site to nearby lymph nodes, organs or tissues, but not to distant sites.

## registered nurse (RN)

A professional nurse who has completed a college program and passed a national examination. RNs may assess, educate, and treat patients, families, or even communities. They may work in and can get certified in almost any health specialty. They can also go back to school to become an advanced practice nurse (APN or APRN) such as a clinical nurse specialist, nurse practitioner, or nurse anesthetist.

## regression [re-gresh-un]

Decrease in the size of a tumor or the amount of the cancer in the body.

## rehabilitation [re-huh-bill-ih-TAY-shun]

Actions taken to help a person adjust, heal, and return to a full, productive life after injury or illness. This may involve physical restoration (such as the use of prostheses, exercises, and physical therapy), counseling, and emotional support.

## relapse [re-laps]

Return of cancer or other disease after a period of time when signs and symptoms of the disease improved.

## relative risk [REH-luh-tiv risk]

The likelihood that people in one group will develop a certain disease compared to people in another group, based on differences in behaviors or conditions. For example, if a behavior or condition lowers the risk of a certain type of cancer by half (50%), you could say it results in a person's relative risk being 50% lower. But the change in overall (absolute) risk would depend on what the person's risk was to begin with. So, for example, if a person's baseline risk of a certain type of cancer is 10% (1 in 10), and a factor lowers this by half, the relative risk would be 50% lower, but the change in absolute risk would be 5% (because their overall risk went from 10% to 5%).

## relative survival rate [REH-luh-tiv ser-VY-vul risk]

The percentage of people with a disease (such as a type of cancer) who are expected

to be alive after a certain period of time when compared to a similar group of people who do not have the disease. Relative survival rates help account for people who die from other causes. Relative survival rates are usually given as a percentage. For instance, if the 5-year relative survival rate of a certain type of cancer is 50%, it means that people with this cancer are half (50%) as likely to still be alive 5 years after their diagnosis, as compared to people without this cancer.

#### rem

See radiation dose.

## remission [re-MISH-un]

A period of time when the cancer is responding to treatment or is under control. In a complete remission, all the signs and symptoms of cancer go away, and 0 0 rg po1bl

## shun puh-lim-er-ace]

A very sensitive test (also called **RT-PCR**) for finding cancer-related genetic changes (mutations), such as those that happen in some cancers. It can detect very small numbers of cancer cells in blood or tissue samples that would be missed by other tests. RT-PCR looks closely at ribonucleic acid (RNA) for changes that might help determine best treatment choices and response to treatment.

## S

## s-phase fraction

The percentage of cells in a sample that are copying their DNA as it gets ready to divide into 2 new cells. If the S-phase fraction is high, it means that the cancer cells are dividing more rapidly.

## saline [say-lean]

Salt and water solution.

## sarcoma [sar-ko-muh]

A cancer that starts in connective tissue, such as cartilage, fat, muscle, or bone.

#### scan

A test that makes detailed pictures of parts of internal body organs. Includes computed tomography (CT) scans, magnetic resonance imaging (MRI) scans, and nuclear medicine scans (such as bone scans and liver scans).

## scanxiety

Worry or concern (anxiety) that develops before, during, or after having imaging scans is called scanxiety. Scanxiety can cause different levels of distress. Some people feel very uneasy (have trouble breathing or feel like their heart is racing), others are only a little concerned.

## scintillation camera [sin-till-LAY-shun]

A device used in nuclear medicine scans to detect radioactivity and make pictures that help diagnose cancer and other diseases.

## screening

Tests, examinations, or procedures used to find cancer in people who have no symptoms. Screening increases the chances of finding certain cancers early, when they are small, have not spread, and might be easier to treat. This is different from diagnostic testing which focuses on trying to find out the cause of a person's symptoms.

#### second cancer

A new, unrelated cancer that develops in people who have already had a different cancer. For example, if someone who has had breast cancer develops colorectal cancer. This is different from cancer coming back after treatment (recurrence).

## secondary tumor

A tumor that forms when the cancer spreads (metastasizes) from the place where it started (the primary site).

## sedation [suh-day-shun]

To make sleepy, calm, or relaxed. Medicines to cause sedation are often used along with medicines to numb an area for a procedure or certain types of surgery.

### sedentary

Not doing much physical activity while awake. Spending a lot of time sitting, reclining, or lying down. People described as sedentary tend to spend a lot of time being physically inactive.

## segmental resection [seg-men-tuhl re-sek-shun]

Surgery to remove part of an organ or to remove a tumor and normal tissue around it. With colon cancer, for instance, the cancer and a length of normal colon on either side of the cancer, as well as the nearby lymph nodes are removed, and the remaining sections of the colon are then reattached. In lung cancer, a section of lobe of a lung is removed. Also called **segmentectomy**.

### selective estrogen receptor modulator (SERM)

A drug used in hormone therapy that blocks estrogen from telling breast cancer cells to grow and divide. Acts like an anti-estrogen in breast cells but like an estrogen in other tissues, like the uterus and the bones. Can be used to treat women with breast cancer

who have or have not gone through menopause. Tamoxifen is the most commonly used SERM.

## semen [see-muhn]

Fluid released during male orgasm that contains sperm and seminal fluid.

## sentinel lymph node biopsy [sen-tin-uhl]

Procedure used instead of routine lymph node dissection (removal) for some cancer types. Blue dye and/or a radioactive substance is injected into the tumor during surgery and the first (sentinel) node that picks up the dye is removed and biopsied. If the first node does not have cancer cells, fewer nodes are removed.

## sex therapist

A mental health professional such as a licensed psychiatrist, social worker, clinical nurse specialist, nurse practitioner, or psychologist with special training in counseling people about sexual changes, problems, and communication (for example, after

## simulation

A process that uses special x-ray pictures to plan radiation treatment so that the area to be treated is precisely located and marked. The radiation can then be delivered as directly as possible to the tumor while lowering effect on normal, healthy tissues.

## smoking rate

Number of people who smoke tobacco products (including cigarettes, cigars, pipes, or any other tobacco or nicotine product) in a defined population. For example, the smoking rate of men age 15 and older in the United States is the percentage of men who smoke out of all men in that age group in the US.

### social determinants of health

Conditions into which people are born, grow up, live, work, worship and age that impact their health, functioning, and quality of life. For example, housing and neighborhoods, quality of education, level of income, available transportation, health care access and quality, and social connections.

# speech therapist

A health professional who is specially trained to work with people who have speech and swallowing problems. Speech therapists help people learn skills to communicate and

Cancer that begins in the squamous cells (thin, flat cells), for example, the skin or the lining of the body's organs.

### stage

The size of a cancer and if and where it has spread from the primary site. A **clinical** stage is based on results of the physical exam, biopsy and imaging tests. A **pathologic** stage is based on how the cells in the tissue samples from surgery or a biopsy look under a microscope.

## staging

The process of finding out how much cancer is in a person's body and where it's located. Different staging systems are used for different types of cancers. The TNM staging system is used the most.

### standard of care

Treatment or care process that medical experts accept as the appropriate treatment for a disease at a certain time.

## standard therapy

Treatment based on studies that show that the treatment is safe and effective in one or more types of cancer or for managing side effects of treatment. Also called **conventional** or **mainstream** treatment.

## statistical analysis

Series of methods used to explore and organize large amounts of data to discover patterns and trends. For example, American Cancer Society researchers use statistical analysis to identify which risk factors affect the development of cancer.

## stem cell transplant

See bone marrow transplant.

### stem cells

Cells that may mature into different types of cells. In cancer, the term usually refers to the immature blood cells (called **hematopoietic stem cells**) found in the bone marrow and in the blood. These stem cells can mature into all types of blood cells.

## stenosis [steh-no-sis]

A narrowing (stricture) of a duct or canal.

#### stent

A very small tube or "straw-like" device put in to support and hold open a tube-shaped organ, such as a blood vessel, bile duct or intestine.

## stereotactic body radiation [steer-e-o-TACK-tick]

Using stereotactic radiosurgery techniques for areas outside the brain, such as to the lung, spine or liver.

## stereotactic needle biopsy [steer-e-o-TACK-tick need-ul by-op-see]

A type of needle biopsy that is useful when calcifications or a small mass can be seen on imaging tests but cannot be felt (such as in a breast) or tumors are in a location where surgery to remove them is risky (such as a brain tumor). A computer maps the location of the mass to guide the placement of the needle.

## stereotactic radiosurgery [steer-e-o-TACK-tick ray-dee-o-SUR-jer-ee]

External radiation treatment (not surgery) that uses special equipment to focus a large dose of radiation to a small tumor area, usually in one session. The radiation is very precisely aimed to affect nearby tissues as little as possible. This treatment is used for brain tumors and other tumors in the head.

## sterility

The inability to have children, which can result from some types of cancer treatment. Also called **infertility**.

#### sternum

Breastbone, the flat bone where the ribs meet in the center at the front of the chest.

### stoma [sto-muh]

An opening made during surgery to connect a body part to the outside. Stomas may be created in the neck to allow a person to breathe (also called a **tracheostomy** or **trach**) or to allow elimination of stool or urine, such as colostomy, ileostomy, or urostomy.

**American Cancer Society** 

# superior

Higher than another part of the body or organ; closer to the head.

# surgeon [sur-jun]

A doctor with special training to cut or remove tumors or parts of the body affected by a disease. A surgical oncologist is a doctor who specializes in surgery to treat cancer. A

define their own experience with cancer and considers a cancer survivor to be anyone who describes themselves this way, from diagnosis throughout the rest of their life.

## survivorship

The state of being a cancer survivor, that is, having been diagnosed with cancer.

# symptom [simp-tuhm]

A change in the body that is noticed by the person who has it, such as pain or fatigue.

## synchronous [sin-kruh-nus]

#### T-cells

A type of immune cell (white blood cell) that plays a large role in the immune response against foreign substances such as viruses, transplanted organs and tissues, and cancer cells. T-cells recognize these foreign substances and release chemical messages called cytokines help trigger other parts of the immune system to destroy the foreign substance. Also known as **T-lymphocytes**.

## targeted therapy

Treatment that uses drugs or other substances to identify and attack certain cancer cells. Targeted therapies tend to affect normal cells less and therefore cause fewer side effects than other cancer treatments.

## temporary brachytherapy

See high-dose rate brachytherapy.

## terminal illness [ter-min-uhl]

An illness that cannot be cured and is expected to lead to the person's death.

## testosterone [tes-toss-ter-own]

Called the male hormone, it is made mostly in the testicles. It controls sex drive (libido), production of sperm, growth in certain tissues, and secondary sexual characteristics. It can also make prostate cancers grow.

## therapy

Any of the measures taken to treat a disease. Also called **treatment**.

## thermography [thur-mog-ruh-fee]

A method in which heat from the breast is measured and mapped. The FDA states that this method should not be used instead of mammogram for breast cancer screening or diagnosis. There is no valid research showing that thermography is an effective screening tool for any medical condition.

## thoracic surgeon [thuh-ras-ick sur-jun]

A doctor who operates on organs in the chest cavity. The word thoracic refers to the

## thorax

## total androgen blockade

See combined androgen blockade.

## toxic [tock-sick]

Something harmful or poisonous, usually resulting in more severe side effects.

## transfusion [trans-few-zhun]

Blood or blood products that are given into a vein (intravenous or IV). Most blood products are taken from unrelated donors and tested for disease before use, but a person can donate their own blood ahead of time to be given during certain planned surgeries or procedures.

## translocation [tranz-low-KAY-shun]

Genetic material that is not in its normal place, as when DNA from one chromosome breaks off and gets attached to a different chromosome. Translocations might be responsible for diseases such as leukemia, breast cancer, schizophrenia, muscular dystrophy, and Down syndrome.

## tumor [too-mer]

An abnormal growth of tissue. Tumors can be benign (not cancer) or malignant (cancer).

#### tumor flare

Temporary worsening of symptoms or tumor markers for a short time after starting treatment.

#### tumor markers

See biomarkers.

## tumor necrosis factor (TNF) [too-mer neck-row-sis]

A substance given off by activated white blood cells that can cause the death of tumor cells.

### tumor suppressor genes

Genes that slow down cell division, repair DNA mistakes, or cause cells to die at the right time. Changes or mutations in these genes can lead to too much cell growth and development of cancer.

## tumor volume

Measure of the amount of cancer present.

U

ulcerative colitis [ul-suh-ruh-tivkuh-lie-tis]

A tyye9Aof cancer.

# urinary incontinence

Partial or complete loss of control of urination.

# urinary retention

Being unable to empty the bladder or unable to urinate.

## urinary urgency

Feeling the need to urinate (paat7Trinae u2 T7Feeling the11 gs 4t[n7U6e.-ni2.47.83 Tm /F1 12 Tf 0 0

A substance designed to help the immune system resist or treat a specific infection or disease. Used to prevent certain infections, such as human papillomavirus (HPV), or help the body fight a specific kind of cancer.

## vaginal dryness and atrophy [va-juh-nuhl drai-nuhs and a-truh-fee]

Loss of moisture and the ability of the walls of the vagina to stretch and move comfortably. Usually occurs after menopause or the decrease in estrogen because of cancer treatment. Can make intercourse difficult and sometimes painful.

## vaginal stenosis [va-juh-nuhl steh-no-sis]

Shortening or narrowing of the vagina because of scar tissue formation after surgery or radiation treatment.

## vascular endothelial growth factor (VEGF) [vas-ku-lur en-doe-THEE-lee-uhl]

A protein that helps tumors form new blood vessels to get nutrients they need to grow.

#### ventral

The front or near the front of the body.

fo 460.3 gs (vaginal stenosis)g 1 72 eteh-no-sis]

Blood cells that help defend the body against infections. There are many types of white blood cells. Certain cancer treatments such as chemotherapy can reduce the number of these cells and make a person more likely to get infections.

## wire localization [lo-cull-ih-ZAY-shun]

A method used during a surgical biopsy when the lump is hard to find or when there is an area that looks suspicious on the x-ray. A thin, hollow needle is placed into the tissue and x-rays are taken to guide the needle to the area of concern. A fine wire is put through the center of the needle. A small hook at the end of the wire keeps it in place. The hollow needle is then removed, and the surgeon uses the path of the wire as a guide to find the abnormal area to be removed.



## x-ray

One form of radiation that can be used at low levels to make an image of the body on film or at high levels to kill cancer cells.

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