Lung Cancer Choices Glossary

A

abnormality (ab-nohr-MAL-uh-tee): A growth or area of tissue that is not normal. An abnormality may or may not be cancer or likely to become cancer.

adenocarcinoma (ADD-in-oh-kar-sin-OH-muh): A type of non-small cell lung cancer. Types of lung cancer are determined by the type of cells in the cancer.

adjuvant therapy (ADD-joo-vent THAIR-uh-pee): Treatment given after the main treatment to help cure a disease.

alcohol (AL-kuh-hall): Wine, beer, or liquor (such as gin or whiskey).

antiangiogenesis therapy (AN-tee-an-jee-oh-JEN-uh-sis THAIR-uh-pee): Using drugs or other treatments to stop new blood vessels from forming in tumors to try to limit tumor growth.

antibodies (AN-tee-BAH-deez): Proteins in the body made by the immune system that fight infection and disease.

arsenic (AHR-sin-ik): A mineral that can occur naturally in rocks and soil, sometimes used as a poison used to kill weeds and pests. Arsenic is also used in some cancer treatments to kill cancer cells.

asbestos (ess-BEST-iss): A natural material that is made of tiny threads or fibers. The fibers can enter the lungs as a person breathes. Asbestos can cause many diseases, including cancer. Asbestos was used to insulate houses from heat and cold. It has also been used in car brakes, in shipyards, and for other purposes. Some old houses still have asbestos in their walls or ceilings.

B

beta-carotene (BAY-tuh KAYR-uh-teen): A vitamin found in orange, bright yellow, and dark green fruits and vegetables.

biological therapy (bye-uh-LAH-juh-kul THAIR-uh-pee): Treatment to boost the immune system's power to fight infections and other diseases. It can also be used to lessen side effects of some treatments. Also called immunotherapy, biotherapy, or biological response modifier (BRM) therapy.

biopsy (BY-ah-psee): To remove cells or tissues from the body for testing and examination under a microscope.

bladder (BLAD-ur): A small sac that holds urine before it passes from the body. The bladder is in the lower part of the belly.

bronchi (BRAHNK-eye): The large airways connecting the windpipe to the lungs. The single form is bronchus. See also bronchial carcinoma.

bronchial carcinoma (BRAHN-kee-yul kar-sin-OH-muh): Cancer that grows in the bronchi, which are the large airways connecting the windpipe to the lungs.

bronchoalveolar carcinoma (BRAHN-koh-al-vee-OH-lur kar-sin-OH-muh): Bronchoalveolar carcinoma (BAC) is a subtype of lung cancer. BAC tumors can be more diffuse (spread out) than other lung cancers.

bronchoscopy (brahn-KAH-skuh-pee): A way to look at the inside of the windpipe, the bronchi, and/or the lungs using a lighted tube. The tube is inserted through the patient's nose or mouth. Bronchoscopy may be used to find cancer or as part of some treatments.

C

cancer registry: A database of cancer cases including information about when they occurred, the type of cancer, and other information.

carcinogen (kar-SIN-uh-jin): Something that causes cancer.

carotenoids (kuh-RAH-tuh-noydz): Pigments made by plants that are commonly found in orange fruits and vegetables and some dark green vegetables. Some carotenoids are used to make vitamin A.

CAT scan: A set of detailed pictures of areas inside the body, taken from different angles. The pictures are made by a computer linked to an X-ray machine. Other names for a CAT scan are computerized axial tomography, computed tomography (CT scan), and computerized spiral (helical) CT scan.

cervical mediastinoscopy (SUR-vuh-kul MEE-dee-eh-stye-NAH-skuh-pee): A surgical procedure to examine the central area of the chest, called the mediastinum. (The heart, windpipe, bronchi, blood vessels, lymph nodes, and esophagus are found here.) The doctor makes a small incision (cut) in the neck to get to the mediastinum. Cervical mediastinoscopy can be used to help learn the stage of disease. It also helps doctors see if cancer has spread to the lymph nodes.

chemoprevention (KEE-moh-preh-VEN-shin): Using things such as drugs or vitamins to try to prevent or slow down cancer. Chemoprevention may be used to help keep someone from ever getting cancer. It is also used to help keep some cancers from coming back.

chemotherapy (KEE-moh-THAIR-up-ee): primarily refers to the treatment of cancer with an antineoplastic drug or with a combination of such drugs into a standardized treatment regimen.

chest radiograph: a picture of the inside of the chest, made with x-rays.

cholesterol (kuh-LES-tur-all): Cholesterol comes from many foods, especially animal products like meat, milk, and cheese. It is used to make hormones and for several other purposes. It also is made by the cells of the body.

chromium (KROH-mee-yum): A kind of metal that comes in different forms and is found in rocks and soil. Some forms are also produced during industrial processes. Chromium is also one of the chemicals found in cigarette smoke.

clinical trial: Process used to evaluate the effectiveness and safety of new medications, procedures, or medical devices by monitoring their effects on large groups of people; the testing usually required by the Food and Drug Administration before approving a new drug, procedure or medical device

> **phase 1 trial** – This is the first clinical trial for studying an experimental drug or treatment in humans. Phase 1 trials are usually small (10-100 people) and are used to determine safety and the best dose for a drug. These trials provide information about side effects, and how the body absorbs and handles the drug. People in these trials usually have advanced disease and have already received the best available treatment.
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> **phase 2 trial** – Phase 2 trials examine whether a drug or therapy is active against the disease it is intended to treat. Side effects are studied. A phase 2 trial is a noncomparative study, meaning the therapeutic effects and side effects of the experimental treatment are not compared to another drug or a placebo.
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> **phase 3 trial** – Phase 3 trials are conducted to find out how well a drug or therapy works compared to standard treatment or no treatment. Phase 3 trials are large studies and usually involve several hundred to thousands of patients.
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> **controlled clinical trial** – A controlled clinical trial divides participants into study groups to determine the effectiveness and safety of a new treatment. One group receives the experimental treatment. The other group receives placebo (an inactive substance) or the standard therapy; this group is called the

control group. Comparison of the experimental group with the control group is the basis of determining the safety and effectiveness of the new treatment.

randomized clinical trial – A randomized clinical trial involves patients who are randomly (by chance) assigned to receive either the experimental treatment or the control treatment (placebo or standard therapy).

colon cancer (KOH-lin KAN-sur): Cancer that begins in the colon, or large intestine.

D

dosimetrists: carefully calculate the dose of radiation to make sure the tumor gets enough radiation. They develop a number of treatment plans that can best destroy the tumor while sparing the normal tissues. Many of these treatment plans are very complex. Dosimetrists work with the doctor and the medical physicist to choose the treatment plan that is just right for each patient. Many dosimetrists start as radiation therapists, and then, with very intensive training, become dosimetrists. Others are graduates of one-to-two-year dosimetry programs. The Medical Dosimetrist Certification Board certifies dosimetrists. (radiologyinfo.org)

dysphagia (dis-FAY-jee-yuh): Trouble swallowing.

dyspnea (DISP-nee-yuh): Shortness of breath.

E

EGFR inhibitors: Stands for epidermal growth factor receptor inhibitors. Epidermal growth factor is a protein in the body that stimulates some cells, including some cancer cells, to grow and multiply. EGFR inhibitors are a class of anti-cancer drugs. They work by blocking epidermal growth factor from stimulating cells to grow.

emphysema (em-fuh-ZEE-muh): A disease that affects the tiny air sacs in the lungs. Emphysema makes it harder to breathe. People who smoke have a greater chance of getting emphysema.

esophagitis (ee-SAH-fuh-JY-tis): Inflammation of the esophagus (the tube that carries food from the mouth to the stomach).

esophagus (eh-SAH-fuh-gus): The tube that carries food from the throat to the stomach.

evidence (EV-uh-dins): Information that is collected in an orderly way about a disease or its treatment. This information often comes from research. Evidence helps doctors and scientists understand what treatments work best on different diseases.

extensive stage SCLC: SCLC stands for small cell lung cancer. SCLC is usually staged as either "limited" or "extensive." Extensive SCLC is cancer that has spread beyond the lung to other parts of the body. See also oat cell and small cell lung cancer.

F

fibrosis (fy-BROH-sis): The growth of fibrous (resembling fibers) tissue.

first line therapy: The first course of treatment used against a disease.

G

gene (jeen): The basic unit of heredity. Genes decide eye color and other traits. Genes also play a role in how high a person's risk is for certain diseases. See also inherited.
gene therapy: Treatment that changes a gene. Gene therapy is used to help the body fight cancer. It also can be used to make cancer cells more sensitive to treatment.

genetic mutation: a change in the structure of a gene

Gray (Gy): The amount of radiation used in radiation therapy is measured in gray (Gy), and varies depending on the type and stage of cancer being treated.

H

hilar (HIGH-lar): Referring to the central portion of each lung where the bronchi, arteries, veins, and nerves enter and exit the lungs.

hypofractionation (HY-poh-FRAK-shuh-NAY-shun): Radiation treatment in which the total dose of radiation is divided into large doses and treatments are given less than once a day. Also called hypofractionated radiation therapy.

I

immune system (ih-MYOON SIS-tim): The complex group of organs and cells that defends the body against infections and other diseases.

infusion: the therapeutic introduction of fluid other than blood into a vein.

inherited (in-HAIR-uh-tid): Something that is passed on from parents to their children. When traits are passed on from one generation to the next, it is called heredity.

K

kidney (KID-nee): A bean-shaped organ that filters waste products from the body and forms urine that is passed into the bladder. Human beings are born with two kidneys, one on each side of the lower back.

L

large cell cancer: A type of non-small cell lung cancer where the cancer cells are large and abnormal.

larynx (LAIR-inks): Voice box. The larynx is part of the breathing system and is found in the throat.

limited stage small cell lung cancer (SCLC): SCLC stands for small cell lung cancer. SCLC is usually staged as either "limited" or "extensive." Limited stage generally means the cancer is found only in one lung and its nearby tissue. See also oat cell and small cell lung cancer.

linear accelerator (LIH-nee-er ak-SEH-leh-RAY-ter): A machine that uses electricity to form a stream of fast-moving subatomic particles. This creates high-energy radiation that may be used to treat cancer. Also called linac, mega-voltage linear accelerator, and MeV linear accelerator.

lobe: A part of an organ, such as the lung.

lobectomy (loh-BEK-tuh-mee): Surgery to remove a lobe of an organ.

low-dose CAT scan: A CAT scan that uses smaller amounts of X-rays than a regular CAT scan.

lymph nodes (LIMF nohdz): Small glands that help the body fight infection and disease. They filter a fluid called lymph and contain white blood cells.

M

mediastinum (mee-dee-uh-STYE-nim): The part of the body between the lungs. The heart, windpipe, esophagus, bronchi, and lymph nodes are found in this area.

medical physics: generally speaking the application of physics concepts, theories and methods to medicine. A medical physics department may be based in either a hospital or a university. Clinical medical physicists are often found in Diagnostic and Interventional Radiology, Nuclear Medicine, and Radiation Oncology.

mesothelioma (mez-uh-thee-lee-YOH-muh): A tumor in the lining of the chest or abdomen (stomach area).

metastasis (muh-TASS-tuh-sis): When cancer spreads to other parts of the body.

Molecular testing: also called assays or profiles, can help your treatment team identify specific biomarkers in a tumor.

MRI (**M**agnetic **R**esonance **I**maging): A type of body scan that uses a magnet linked to a computer to make detailed pictures of areas inside the body. An MRI can be used to find cancer.

N

neoadjuvant therapy (NEE-oh-ADD-joo-vent THAIR-uh-pee): Treatment given before the main treatment to help cure a disease.

neutropenia (noo-truh-PEE-nee-yuh): An abnormal decrease in a type of white blood cells. The body needs white blood cells to fight disease and infection.

nickel (NIK-ul): A kind of metal found in soil and often used in alloys and in industry.

O

oat cell: Another name for small cell lung cancer. The name "oat cell" comes from the fact that the cells look like oats. See also extensive SCLC and limited SCLC.

oncologist (ahn-KAH-luh-jist): A doctor who specializes in studying and treating cancer.

ototoxicity (oh-tuh-tok-sis-i-tee): having a harmful effect on the organs or nerves concerned with hearing and balance.

P

pancreas (PAN-kree-yus): A large gland that helps digest food and also makes some important hormones.

pericarditis: Inflammation of the pericardium (the fibrous sac surrounding the heart).

peripheral neuropathy (puh-RIF-uh-rul noo-RAH-puh-thee): Numbness, tingling, burning, or weakness that usually begins in the hands or feet. Some anticancer drugs can cause this problem.

PET scan (**P**ositron **E**mission **T**omography **S**can): A PET scan is a way to find cancer in the body. In a PET scan, the patient is given radioactive glucose (sugar) through a vein. A scanner then tracks the glucose in the body. The scanner's pictures can be used to find cancer, since cancer cells tend to use more sugar than other cells.

phlegm (flem): Thick mucus from the airways of the body.

pleura (PLOO-rah): The thin lining that covers the lungs and the inside of the chest wall that cushions the lungs. The pleura normally releases a small amount of fluid. The fluid helps the lungs move freely during breathing.

pleural effusion (PLOO-rul eh-FYOO-zhin): When too much fluid collects between the lining of the lung and the lining of the inside wall of the chest.

pneumonectomy (noo-muh-NEK-tuh-mee): Surgery to remove a lung.

pneumonitis (NOO-moh-NY-tis): Inflammation of the lungs. This may be caused by disease, infection, radiation therapy, allergy, or irritation of lung tissue by inhaled substances.

primary cancer: The first or original cancer diagnosis.

prognosis (prahg-NOH-sis): The course a disease is likely to follow, including how long it will last, what the result will be, and the chances for recovery.

prostate cancer (PRAH-stayt KAN-sur): Cancer that begins in the prostate, which is a gland in men. The prostate is about the size of a walnut and sits just below the bladder.

pulmonologist (pull-min-AH-luh-jist): A doctor who specializes in studying and treating diseases of the lungs.

Q

quartile (KWOR-tyl): A term used in medical statistics to mean a group containing one-quarter or 25 percent of the total.

R

radiation (ray-dee-AY-shin): The emission of energy in waves or particles. Often used to treat cancer cells.

radiation oncologist (RAY-dee-YAY-shun ahn-KAH-luh-jist): A doctor who has special training to treat cancer patients with radiation.

radiation therapist (RAY-dee-AY-shun THAYR-uh-pist): A health professional who gives radiation treatment.

radon (RAY-dahn): An odorless, colorless gas known to increase risk of cancer. Radon comes from rocks and dirt and can get trapped in houses and buildings.

recurrence: When cancer comes back after a period when no cancer could be found.

resection: Surgery to remove tissue, an organ, or part of an organ.

S

selenium (seh-LEE-nee-um): A mineral found in rocks and soil, often used in electronics and other industries. It is also a mineral the body needs in small amounts.

silica (SILL-uh-kuh): A substance found in rocks, sand, and quartz as well as some workplaces.

small cell lung cancer: A type of lung cancer made up of small, round cells. Small cell lung cancer is less common than non-small cell lung cancer and often grows more quickly. The name is often shortened to SCLC. Another name for SCLC is oat cell cancer. See also extensive SCLC and limited SCLC.

spiral (helical) CT scan: Pictures created by a computer linked to an X-ray machine that scans the body in a spiral path. Also called helical computed tomography.

sputum (SPEW-tim): Mucus and other things brought up from the lungs in coughing.

sputum cytology (SPEW-tim sie-TAH-luh-jee): A screening test for lung cancer. In this test, doctors look at phlegm under the microscope to check for cancer cells.

squamous cell carcinoma (SQUAY-mus SEL kar-sin-OH-muh): A type of non-small cell lung cancer that begins in the squamous cells of the lungs. Squamous cells are found in the skin, the lining of the hollow organs (such as the stomach), and in the breathing and digestive tracts.

stage: How much cancer is in the body and how far it has spread.

stereotactic radiosurgery (STAYR-ee-oh-TAK-tik RAY-dee-oh-SER-juh-ree): A type of external radiation therapy that uses special equipment to position the patient and precisely give a single large dose of radiation to a tumor. It is used to treat brain tumors and other brain disorders that cannot be treated by regular surgery. It is also being studied in the

treatment of other types of cancer. Also called radiation surgery, radiosurgery, and stereotaxic radiosurgery.

stereotactic body radiation therapy (STAYR-ee-oh-TAK-tik): A type of external radiation therapy that uses special equipment to position a patient and precisely deliver radiation to tumors in the body (except the brain). The total dose of radiation is divided into smaller doses given over several days. This type of radiation therapy helps spare normal tissue.

T

thoracic surgeon (thuh-RASS-ik): A doctor who specializes in chest, heart, and lung surgery.

TNM — A system for describing stages of cancer. T describes the size of the tumor and whether it has grown into nearby tissues. N describes any lymph nodes involved. M describes metastasis.

toxicity (tahx-SIS-uh-tee): How toxic or poisonous something is.

trachea (TRAY-kee-yuh): The airway connecting the larynx to the lungs; windpipe.

V

vaccine (vax-EEN): A substance meant to help the immune system respond to and resist disease.

VATS (**V**ideo-**A**ssisted **T**horacoscopic **S**urgery): A surgical procedure performed inside the chest with the help of a camera on a tube. In VATS, several small incisions (cuts) are made in the chest. Doctors insert the tube with the camera through one incision, and tools to work with through the others. The camera helps the doctors see inside the chest to operate.

W

wedge resection: Surgery to remove a wedge-shaped piece of tissue.