

## Glossary of terms for lung cancer

### A

<b>Adjuvant chemotherapy</b>	The use of anticancer drugs after surgery to decrease the chance of the cancer coming back or recurring.
<b>Adjuvant therapy</b>	A treatment method used in addition to the primary therapy; used to improve the chances of curing cancer.
<b>Alopecia</b>	Loss of hair, which can include body hair and which is a side effect of some cancer treatments.
<b>Alveoli</b>	Tiny air sacs found at the end of the smallest branches of the bronchial tree in the lungs. Oxygen passes through the alveoli and into the bloodstream. Carbon dioxide passes from the bloodstream into the alveoli and is breathed out through the lungs.
<b>Anemia</b>	A condition where the number of red blood cells in the blood is lower than normal. Anemia can occur because of the cancer itself or from the treatments. Symptoms of anemia include fatigue and shortness of breath.
<b>Anesthetic</b>	A drug that causes a loss of feeling or awareness and that may be used locally or generally, in which case sleep occurs.
<b>Anorexia</b>	A lack of appetite for food.
<b>Antibiotic</b>	A drug that fights bacterial infections by killing or reducing the growth of bacteria.
<b>Antiemetic</b>	A drug that reduces or prevents nausea or vomiting.
<b>Asymptomatic</b>	Not having the signs or symptoms of a disease.
<b>Atypical</b>	Abnormal or not usual.
<b>Axillary node</b>	A lymph node located in the armpit (axilla).

## B

<b>Biopsy</b>	The removal of a small piece of tissue for lab examination.
<b>Blood cells</b>	General terms describing the three types of cells in blood (white blood cells—WBC, red blood cells—RBC and platelets), all of which are made in the bone marrow.
<b>Blood count</b>	A routine test that determines the number of white blood cells, red blood cells and platelets in a sample of blood.
<b>Bone marrow</b>	Spongy material found inside some bones that produces blood cells.
<b>Bone metastases</b>	Tumour cells that have spread from the original (primary) tumour to the bone.
<b>Bone scan</b>	A procedure by which an image of the bones is produced after the injection of a radioisotope. A bone scan is used to determine if the cancer has spread to the bones.
<b>Brachytherapy</b>	A type of internal radiation therapy treatment. A radioactive source is placed in the area of the tumour and affects only that local area.
<b>Brain scan</b>	A test used to determine if cancer has spread to the brain.
<b>Bronchial carcinoma</b>	Lung cancer.
<b>Bronchiole</b>	Very small tube(s) in the lungs that are without cartilage and that are at the end of the bronchus before it leads into the alveolus (plural: alveoli).
<b>Bronchoscope</b>	A long thin instrument that is inserted into the throat or nasal passage to examine the larger lung breathing passages; see fibre optic bronchoscopy.
<b>Bronchoscopy</b>	The examination of the lung breathing passages with a bronchoscope.
<b>Bronchus</b>	Either of the two main breathing tubes (plural: bronchi) branching off from the windpipe (trachea); one bronchus leads to each lung.

**C**

<b>Cancer cell</b>	A cell that divides and reproduces abnormally and is capable of invading (metastasizing to) other tissues.
<b>Carcinoma in situ</b>	Early-stage cancer in which the tumour cells have not yet invaded surrounding tissues.
<b>Carcinogen</b>	A substance that causes cancer.
<b>Capillaries</b>	Tiny blood vessels.
<b>Catheter</b>	A flexible tube inserted into the body to transport fluids into or out of the body.
<b>Cell</b>	The basic building block of all living tissues, a cell is comprised of a nucleus (the “brain” of the cell), cytoplasm surrounding the nucleus and a cell wall containing the cytoplasm and the nucleus.
<b>Central nervous system (CNS)</b>	The control center for the body and made up of the spinal cord and the brain.
<b>Central venous catheter</b>	A special catheter placed in a large vein. It is left in place as long as necessary to deliver and/or withdraw fluids or administer drugs such as chemotherapy drugs.
<b>Chemotherapy</b>	A drug or combination of drugs used to destroy cancer cells.
<b>Chronic</b>	Lasting for a long period of time.
<b>Combination chemotherapy</b>	Treatment using two or more anticancer medications.
<b>Combined modality therapy</b>	Two or more types of cancer treatment given either at the same time or in sequence, and that can include combinations of radiation therapy, chemotherapy, surgery or other treatments.
<b>Complementary therapy</b>	Techniques or approaches that may be used in addition to a standard treatment. Examples are meditation and changes in types of food eaten.
<b>Complete blood count (CBC)</b>	An analysis to determine the quantities of various parts or components of the blood (see Blood count).

<b>Complete remission</b>	The disappearance of all signs of cancer in response to treatment. This does not always mean the cancer has been cured. Also called complete response.
<b>Complete response</b>	The disappearance of all signs of cancer in response to treatment. This does not always mean the cancer has been cured. Also called complete remission.
<b>Complications</b>	Unexpected symptoms or problems resulting from medical treatment such as surgery, chemotherapy or radiotherapy.
<b>Consent form</b>	A hospital or clinic legal form that informs patients about all the potential risks and benefits of <u>any</u> treatment they are to receive. Before a treatment can start, the form must be explained to the patient by the hospital or clinic staff, and the patient then can sign the form if they agree that they understand the risks and benefits and consent to the treatment.
<b>Cure</b>	No sign of a disease or cancer is present in the body, and sufficient time has passed that the chance of the disease or cancer reoccurring is small.
<b>CT scan or CAT scan (computed axial tomography)</b>	A diagnostic test that uses a combination of x-ray and computers to produce cross-sectional views (or layers) of the inside of the body.
<b>Cytology</b>	The study of cells and their origin, structure and function.

## D

<b>Diagnostic procedure</b>	A medical method used to identify (diagnose) the type of disease or abnormality and its cause.
<b>Diaphragm</b>	A major muscle that separates the chest from the abdominal cavity (the stomach and other parts) and helps with breathing.
<b>Dysphagia</b>	Difficulty in swallowing.
<b>Dyspnea</b>	Shortness of breath or “air hunger”.

## E

<b>Edema</b>	Swelling of a body part due to a build up of fluid in the tissue.
<b>Epithelium</b>	The covering or lining of organs, glands, or other structures in the body. Cancers of the epithelium are called carcinomas.
<b>Erythema</b>	Redness of the skin.
<b>Erythrocyte</b>	The red blood cell that carries oxygen to the cells and carries carbon dioxide away from them.
<b>Erythropoietin</b>	A hormone that stimulates cells in the bone marrow to produce red blood cells.
<b>Esophagus</b>	The part of the body that connects the mouth to the stomach. A common name is the “swallowing tube”.
<b>Excision</b>	Removal by surgery.
<b>Expectorant</b>	Medicine that helps a person cough up thick fluid (secretions) from the lungs.

## F

<b>Fibre optic bronchoscopy</b>	A procedure, either diagnostic or therapeutic, to examine the breathing passages of the lungs.
<b>Fraction</b>	The dose of radiation for a single treatment.
<b>Fractionation</b>	Dividing the total dose of radiation therapy into several smaller, equal doses that are delivered over a period of several days.

## G

<b>Granulocyte</b>	A type of white blood cell (WBC) that fights bacteria.
<b>Granulocytopenia</b>	Having a lower than normal number of granulocytes in the blood, which may reduce the ability of the immune system to fight infection.

---

## H

<b>Hematologist</b>	A doctor who specializes in diseases of the blood.
<b>Hematology</b>	The study of blood, blood-producing organs and blood disorders or diseases.
<b>Hemoglobin</b>	The iron-protein part or component of red blood cells that carries oxygen to body tissues.
<b>Hemoptysis</b>	Coughing or spitting up blood in the sputum (spit).
<b>Hospice</b>	A place or program dedicated to caring for patients and their families near the end of life.
<b>Hypercalcemia</b>	Abnormally high concentrations of calcium in the blood, which can cause symptoms of nausea, vomiting, constipation, fatigue, and sleepiness.
<b>Hyperfractionated radiation</b>	The total daily dose of radiation divided into smaller doses and given more than once a day.

## I

<b>Imaging procedures</b>	Methods of producing pictures of areas inside the body that include x-ray, ultrasound, CT scan, MRI and nuclear medicine scans.
<b>Immune function</b>	The production of cells that fight disease or infection.
<b>Immune response</b>	The activity of the immune system against foreign cells and disease.
<b>Incision</b>	A cut, usually used in reference to a surgical incision.
<b>In situ</b>	In place, localized, and confined to one area; a very early stage of cancer.
<b>Infection</b>	The reaction caused when disease-producing organisms such as viruses and bacteria invade and multiply in the body.

---

<b>Informed consent</b>	Legal procedure conducted to ensure that a patient understands the potential risks and benefits of a treatment before it is started. The patient is informed about the treatment procedure, the potential risks and benefits, and even possible alternative treatments. To give informed consent the patient must be competent to understand the explanations and must give consent voluntarily.
<b>Intravenous</b>	When drugs or fluids are put into a vein either by a single injection or continuously through a needle, tubing, and a solution bag; abbreviated as IV.
<b>Invasive cancer</b>	Cancer that has spread beyond where it started and is growing into surrounding, healthy tissues. Also called infiltrating cancer.

## L

<b>Larynx</b>	The “voice box”, which is located above the windpipe (trachea).
<b>Laser treatment</b>	The use of an intense narrow beam of laser light to kill cancer cells.
<b>Lesion</b>	An abnormal change in the structure of a tissue due to an injury or disease.
<b>Leukocyte</b>	A type of white blood cell (WBC) that protects the body against disease.
<b>Leukopenia</b>	An abnormally low number of leukocytes or WBCs, which decreases a person’s ability to fight infection or disease.
<b>Lobe</b>	The division of a body organ such as the lung or liver marked by a surface fissure (crease). There are usually two lobes in the left lung and three lobes in the right lung.
<b>Lobectomy</b>	Surgical removal of one lobe of the lung.
<b>Local treatment</b>	Treatment that affects a tumour and the area close to it.

<b>Locally advanced cancer</b>	Cancer that has spread only to nearby tissue or lymph nodes, but not to other parts of the body.
<b>Lung metastases</b>	Tumour cells that have spread from the original (primary) tumour to the lung or to multiple areas within a lung.
<b>Lymph</b>	An almost colourless fluid that travels through the lymph or lymphatic system to help fight infection or disease.
<b>Lymph node</b>	A small bean-shaped organ that acts as a filter to collect bacteria and other foreign substances from the lymph or lymphatic system to be processed by the immune system. There are chains of lymph nodes throughout the body.
<b>Lymphatic (lymph) system</b>	The internal body network including the lymph nodes, lymph cells and lymph fluid that drains bacteria and other foreign substances from the body but that can also be an avenue of spread for cancer cells.
<b>Lymphocyte</b>	A type of WBC that fights viruses and other foreign substances.

## M

<b>MRI (magnetic resonance imaging)</b>	A test that uses a magnetic field to create two-dimensional images of the body.
<b>Malignant mesothelioma</b>	A malignant tumour that starts from the lining (pleura) of the chest cavity or covering of the lungs. This type of lung cancer has been linked to exposure to asbestos.
<b>Mediastinum</b>	The area between the two lungs containing body parts such as the esophagus (feeding or swallowing tube), trachea (windpipe), heart and lymph nodes.
<b>Medical oncologist</b>	A doctor who specializes in the treatment of cancer, including using chemotherapy
<b>Mediastinoscopy</b>	A surgical procedure that examines the lymph nodes along the trachea (windpipe) behind the breastbone for the presence of cancer or other diseases.

<b>Metastasis</b>	The spread of cancer cells from the original tumour to other parts of the body.
<b>Metastatic cancer</b>	Cancer that has spread from one part of the body to another.
<b>Modality</b>	A type or kind of treatment such as surgery.
<b>Mucositis</b>	Inflammation of the mucous membranes (lining) such as in the mouth or digestive system, which causes pain, soreness and/or excessive mucous production.
<b>Multimodality therapy</b>	Therapy that combines more than one method of treatment such as chemotherapy plus radiation.
<b>Myelosuppression</b>	A side effect of chemotherapy that causes a slowed production of blood cells.
<b>N</b>	
<b>Nausea</b>	Feeling sick to your stomach and needing to vomit.
<b>Needle aspiration biopsy</b>	The withdrawal of fluid or cells from a part of the tumour for examination under a microscope.
<b>Neoadjuvant therapy</b>	Initial treatment, such as chemotherapy, given to reduce the size of a cancerous tumour before surgery or radiation.
<b>Neurologic(al)</b>	Involving the nerves or nervous system.
<b>Neuropathy</b>	Nerve malfunction that may be caused by chemotherapy. Numbness or weakness is a common symptom.
<b>Neutropenia</b>	An abnormally low number of neutrophils or WBCs that may increase the risk of infection, depending on how low the count is and for how long.
<b>Neutrophil</b>	A type of WBC that fights bacterial infections.
<b>Neurotoxicity</b>	The tendency of some treatments to cause damage to the nervous system.

## O

<b>Oncologist</b>	A doctor who specializes in the study, diagnosis and treatment of cancer.
<b>Oncology</b>	The study of the development, diagnosis and prevention of cancer.

## P

<b>Parietal pleura</b>	The membrane that lines the inner wall of the chest cavity.
<b>Pathologic fracture</b>	A broken bone often caused by metastases to the bone or other disease-related problems.
<b>Pathology</b>	The study of the nature of disease and its causes, processes, development and consequences.
<b>Peripheral neuropathy</b>	Nerve damage resulting from disease of or treatment to nerve endings. Numbness, tingling, and loss of movement may be noticed in the hands and feet.
<b>Phase I clinical trial</b>	The phase of clinical research in which the safety and dosage of drugs are evaluated for the first time in humans. Because these treatments are new, there may be risks to participants; therefore, these trials are only open to a small number of healthy volunteers.
<b>Phase II clinical trial</b>	These trials focus on assessing the effectiveness of a treatment in a larger number of patients with the same type and stage of cancer. They help to better determine the potential usefulness of a new treatment in that cancer and to assess side effects that may not have been seen in Phase I trials.
<b>Phase III clinical trial</b>	Evaluates safety, efficacy, dosing and side effects of a new therapy compared to a standard treatment in a large group of patients in randomized controlled multicentre trials.
<b>Phase IV clinical trial</b>	A 'postmarketing' trial of a drug treatment after its approval by the Health Protection Bureau (HPB) in Canada and its availability for sale in Canada.
<b>Plasma</b>	The liquid part of the blood.

<b>Platelet</b>	A type of blood cell that helps control bleeding by causing clotting and is also called a thrombocyte.
<b>Platelet count</b>	The measurement of the number of platelets in the blood.
<b>Platinum-based therapy</b>	The use of a combination of chemotherapy drugs, one of which contains the drug cisplatin or carboplatin.
<b>Pulmonary pleura</b>	The membrane that covers the external surfaces of the lungs.
<b>Pleura</b>	Two thin membranes (parietal and pulmonary), separated by fluid (pleural effusion or fluid), that cover the lungs and line the chest cavity.
<b>Pleural effusion</b>	Excess (pleural) fluid that collects between the lungs and the lining of the chest wall.
<b>Pleurodesis</b>	A procedure using talcum or chemicals to eliminate the space between the lining of the lungs and the lining of the chest cavity to prevent the build up of pleural fluid within that space.
<b>Pneumonectomy</b>	Surgical removal of one lung.
<b>Port</b>	A device placed beneath the skin and connected to a catheter in a vein for the delivery of medication or fluids.
<b>Positron emission tomography (PET or PET scan)</b>	A scanning test that produces images of the inside of the human body and its metabolic functions.
<b>Primary tumour</b>	The tumour at the original site where the cancer began.
<b>Psychological support</b>	Support designed to meet psychological and social needs, particularly those of a patient.

## R

<b>Radiation oncologist</b>	A doctor who specializes in the treatment of cancer with radiation therapy.
<b>Radiation surgery</b>	Also known as radiosurgery or stereotactic external beam irradiation or radiotherapy (EBRT); a type of therapy that delivers a single high dose of radiation directly to the tumour, sparing the healthy tissues from the effects of the radiation.
<b>Radiation therapy</b>	X-ray treatment that damages or kills cancer cells.
<b>Radiologist</b>	A doctor with training in reading diagnostic x-rays and performing specialized x-ray procedures.
<b>Recurrent cancer</b>	Cancer that has come back after treatment. Recurrent cancer may occur in the original site, or it may return elsewhere in the body.
<b>Red blood cell (RBC)</b>	A type of blood cell that carries oxygen to the cells of the body and removes carbon dioxide.
<b>Regimen</b>	The plan that outlines the dosage, schedule and duration of treatment.
<b>Regional involvement</b>	The spread of cancer from its original site to nearby surrounding areas.
<b>Regression</b>	A reduction in the symptoms or extent of cancer growth and spread.
<b>Remission</b>	The time when a disease is under control and the person is free from signs and symptoms.

## S

<b>Screening</b>	A procedure or procedures used to determine if disease is present where there are no symptoms (or a person is asymptomatic).
<b>Secondary tumour</b>	A tumour that develops as a result of metastases or the spread of cancer beyond the original site to another part of the body. If lung cancer cells, for example, metastasize to bone, the secondary tumour in the bone will be made of lung cancer cells.

<b>Segmental resection</b>	The surgical removal of an anatomic segment of tissue, for example, lung tissue. Lobes of the lung are divided into segments by creases (fissures).
<b>Side effects</b>	An undesirable effect (adverse reaction) in the body caused by the cancer treatment rather than the cancer itself.
<b>Simulation</b>	A process involving the use of special x-ray pictures to plan radiation treatment.
<b>Solid tumour</b>	A cancer of body tissues other than those of the blood, bone marrow, or lymphatic system. Lung cancer is classified as a solid tumour.
<b>Sputum</b>	Mucus from the bronchial tubes.
<b>Sputum cytology</b>	The examination by microscope of cells in sputum coughed up from the lungs; usually used to look for the presence of cancer cells.
<b>Standard treatment</b>	Treatment that is commonly used for a condition, because it has been proved effective.
<b>Steroid therapy</b>	The use of drugs that mimic the action of some of the hormones in the body and that may reduce such symptoms of inflammation as swelling and pain.
<b>Stomatitis</b>	An inflammation of the tissues that line the mouth, a side effect of radiation therapy.
<b>Surgical biopsy</b>	Surgical removal of a segment of tissue for examination under a microscope.
<b>Surgical resection</b>	Removal of tissue from the body through a surgical procedure.
<b>Systemic disease</b>	Disease that affects the whole body rather than only an organ or single site.
<b>Systemic treatment</b>	A treatment that reaches cells all over the body by traveling through the bloodstream.

<b>T</b>	
<b>Terminal</b>	A term used to describe an advanced stage of disease with limited life expectancy.
<b>Therapy</b>	Treatment.
<b>Thoracentesis</b>	The removal of fluid, by a needle, from the space (pleural space) between the lungs and the chest wall.
<b>Thoracic</b>	Relating to the thorax or chest.
<b>Thoracic surgeon</b>	A doctor who performs surgery on disease and injury in the chest area.
<b>Thoracoscope</b>	An instrument, fitted with a lighting system and telescopic attachment, designed for examining the inside of the chest cavity (thoracoscopic examination).
<b>Thoracotomy</b>	A surgical procedure in which an incision is made through the chest wall to examine structures in the chest for the presence of cancer or other disease.
<b>Thorax</b>	The upper part of the body between the neck and chest.
<b>Thrombocyte</b>	A blood cell also called a platelet that helps to control bleeding by causing clotting.
<b>Tunnelled catheter</b>	A specialized catheter that is inserted into a large vein near the heart and is used for the delivery of medications, transfusions, and blood sampling.

© Understanding Lung Cancer, Cancer Care Ontario, 2004. Updated by the Lung Disease Site Team and Patient Education Services at the Juravinski Cancer Centre, Hamilton, Ontario 2011.