

## TREATMENT and SIDE EFFECTS

[from [cancer.gov](http://cancer.gov) (U.S. government site), unless indicated otherwise]

**ablation** (a-BLAY-shun)

In medicine, the removal or destruction of a body part or tissue or its function. Ablation may be performed by surgery, hormones, drugs, radiofrequency, heat, or other methods.

**actinomycin D** (AK-tih-noh-MY-sin ...) Also called Cosmegen and Dactinomycin.

A drug used to treat Ewing sarcoma, gestational trophoblastic tumor, Wilms tumor, and certain types of testicular cancer. It is also used to treat rhabdomyosarcoma in children. It is being studied in the treatment of other types of cancer. Actinomycin D comes from the bacterium *Streptomyces parvulus*. It damages the cell's DNA and may kill cancer cells. It is a type of anticancer antibiotic.

**active surveillance** (AK-tiv ser-VAY-lents)

A treatment plan that involves closely watching a patient's condition but not giving any treatment unless there are changes in test results that show the condition is getting worse. Active surveillance may be used to avoid or delay the need for treatments such as radiation therapy or surgery, which can cause side effects or other problems. During active surveillance, certain exams and tests are done on a regular schedule. It may be used in the treatment of certain types of cancer, such as prostate cancer, urethral cancer, and intraocular (eye) melanoma. It is a type of expectant management.

**AD**

Chemotherapy regime that consists of Doxorubicin (SEE Dox-SL, below) and Dacarbazine (below). [From [chemocare.com](http://chemocare.com)]

**adjunct therapy** (A-junkt THAYR-uh-pee) Also called Adjunctive therapy.

Another treatment used together with the primary treatment. Its purpose is to assist the primary treatment.

**adjuvant therapy** (A-joo-vunt THAYR-uh-pee)

Additional cancer treatment given after the primary treatment to lower the risk that the cancer will come back. Adjuvant therapy may include chemotherapy, radiation therapy, hormone therapy, targeted therapy, or biological therapy.

**adverse effect** (AD-vers eh-FEKT) Also called Adverse event.

An unexpected medical problem that happens during treatment with a drug or other therapy. Adverse effects do not have to be caused by the drug or therapy, and they may be mild, moderate, or severe.

**Alkylating agents** A family of anticancer drugs that work by interfering with the DNA of a cell to prevent normal division.

**Allogenic transplant** Type of bone marrow transplant in which the marrow is donated by another person.

**alopecia** (A-loh-PEE-shuh)

The lack or loss of hair from areas of the body where hair is usually found. Alopecia can be a side effect of some cancer treatments.

**alpha emitter radiation therapy** (AL-fuh ee-MIH-ter RAY-dee-AY-shun THAYR-uh-pee)

Therapy that uses a radioactive substance that gives off a type of high-energy radiation called an alpha-particle to kill cancer cells. The radioactive substance is injected into a vein, travels through the blood, and collects in certain tissues in the body, such as areas of bone with cancer. This type of radiation may cause less damage to nearby healthy tissue. Alpha emitter radiation therapy is used to treat prostate cancer that has spread to the bone, and it is being studied in the treatment of other types of cancer.

**alternative medicine** (all-TER-nuh-tiv MEH-dih-sin)

Treatments that are used instead of standard treatments. Standard treatments are based on the results of scientific research and are currently accepted and widely used. Less research has been done for most types of alternative medicine. Alternative medicine may include special diets, megadose vitamins, herbal preparations, special teas, and magnet therapy. For example, a special diet may be used instead of anticancer drugs as a treatment for cancer.

**ANC** Also called Absolute Neutrophil Count.

A measure of the number of neutrophils in the blood. Neutrophils are a type of white blood cell. They help the body fight infection. An ANC may be used to check for infection, inflammation, leukemia, and other conditions. The lower a person's ANC is, the higher the risk is of getting an infection. Having an ANC of less than 500 means there is a high risk of getting an infection. Cancer treatment, such as chemotherapy, may reduce the ANC.

**AP23573** Also called Ridaforolimus.

A substance being studied in the treatment of soft tissue and bone cancers. It is also being studied in the treatment of other solid tumors and hematologic cancer. AP23573 stops cells from dividing and may cause cancer cells to die. It is a type of mTOR inhibitor.

**assent process** (uh-SENT PRAH-ses)

A process that is required by law in which children or adolescents are given easy-to-understand information about a clinical trial to help them decide if they want to take part in the trial. The patient is given a chance to ask questions about what will happen during the trial, why it's being done, and what they will be asked to do. Formal consent to enter the trial comes from the parent or guardian.

[asthenia](#) (as-THEE-nee-uh)

Weakness; lack of energy and strength.

[ataxia](#) (uh-TAK-see-uh)

Loss of muscle coordination.

[autologous](#) (aw-TAH-luh-gus)

Taken from an individual's own tissues, cells, or DNA.

[best practice](#) (... PRAK-tis) Also called Standard medical care, Standard of care, and Standard therapy.

Treatment that is accepted by medical experts as a proper treatment for a certain type of disease and that is widely used by healthcare professionals.

[bone marrow ablation](#) (bone MAYR-oh a-BLAY-shun)

A procedure to destroy bone marrow using radiation or high doses of anticancer drugs. It is done before a bone marrow or blood stem cell transplant to kill cancer cells and bone marrow cells. This makes room for healthy stem cells.

[bone marrow aspiration](#) (bone MAYR-oh AS-pih-RAY-shun)

A procedure in which a small sample of bone marrow is removed, usually from the hip bone, breastbone, or thigh bone. A small area of skin and the surface of the bone underneath are numbed with an anesthetic. Then, a special wide needle is pushed into the bone. A sample of liquid bone marrow is removed with a syringe attached to the needle. The bone marrow is sent to a laboratory to be looked at under a microscope. This procedure may be done at the same time as a bone marrow biopsy.

[bone marrow biopsy](#) (bone MAYR-oh BY-op-see)

A procedure in which a small sample of bone with bone marrow inside it is removed, usually from the hip bone. A small area of skin and the surface of the bone underneath are numbed with an anesthetic. Then, a special, wide needle is pushed into the bone and rotated to remove a sample of bone with the bone marrow inside it. The sample is sent to a laboratory to be looked at under a microscope. This procedure may be done at the same time as a bone marrow aspiration.

[candidiasis](#) (KAN-dih-DY-uh-sis) Also called Candidosis and Thrush. A condition in which *Candida albicans*, a type of yeast, grows out of control in moist skin areas of the body. It is usually a result of a weakened immune system, but can be a side effect of chemotherapy or treatment with antibiotics. Candidiasis usually affects the mouth (oral candidiasis); however, rarely, it spreads throughout the entire body.

[CAT scan](#) (... skan) Also called Computed Tomography scan, Computerized Axial Tomography scan, Computerized Tomography, and CT scan.

A procedure that uses a computer linked to an x-ray machine to make a series of detailed pictures of areas inside the body. The pictures are taken from different angles and are used to create 3-dimensional (3-D) views of tissues and organs. A dye may be injected into a vein or swallowed to help the tissues and organs show up more clearly. A CAT scan may be used to help diagnose disease, plan treatment, or find out how well treatment is working.

[cause-specific survival](#) (kawz-speh-SIH-fik ser-VY-vul) Also called CSS. The length of time from either the date of diagnosis or the start of treatment for a disease, such as cancer, to the date of death from the disease. Patients who die from causes unrelated to the disease are not counted in this measurement. In a clinical trial, measuring the cause-specific survival is one way to see how well a new treatment works.

[chemoimmunotherapy](#) (KEE-moh-IH-myoo-noh-THAYR-uh-pee) Chemotherapy combined with immunotherapy. Chemotherapy uses different drugs to kill or slow the growth of cancer cells; immunotherapy uses treatments to stimulate or restore the ability of the immune system to fight cancer.

[chemoradiation](#) (KEE-moh-RAY-dee-AY-shun) Also called Chemoradiotherapy.

Treatment that combines chemotherapy with radiation therapy.

chemotherapy (KEE-moh-THAYR-uh-pee)

Treatment with drugs that kill cancer cells.

clinical trial (KLIH-nih-kul TRY-ul) Also called Clinical study.

A type of research study that tests how well new medical approaches work in people. These studies test new methods of screening, prevention, diagnosis, or treatment of a disease.

clinical trial phase (KLIH-nih-kul TRY-ul fayz)

A part of the clinical research process that answers specific questions about whether treatments that are being studied work and are safe. Phase I trials test the best way to give a new treatment and the best dose. Phase II trials test whether a new treatment has an effect on the disease. Phase III trials compare the results of people taking a new treatment with the results of people taking the standard treatment. Phase IV trials are done using thousands of people after a treatment has been approved and marketed, to check for side effects that were not seen in the phase III trial.

cohort study (KOH-hort STUH-dee)

A research study that compares a particular outcome (such as lung cancer) in groups of individuals who are alike in many ways but differ by a certain characteristic (for example, female nurses who smoke compared with those who do not smoke).

compassionate use trial (kum-PA-shuh-nut yoos TRY-ul) Also called Expanded access trial.

A way to provide an investigational therapy to a patient who is not eligible to receive that therapy in a clinical trial, but who has a serious or life-threatening illness for which other treatments are not available.

Compassionate use trials allow patients to receive promising but not yet fully studied or approved cancer therapies when no other treatment option exists.

complementary and alternative medicine (KOM-pleh-MEN-tuh-ree... all-TER-nuh-tiv MEH-dih-sin) Also called CAM.

Forms of treatment that are used in addition to (complementary) or instead of (alternative) standard treatments. These practices generally are not considered standard medical approaches. Standard treatments go through a long and careful research process to prove they are safe and effective, but less is known about most types of complementary and alternative medicine. Complementary and alternative medicine may include dietary supplements, megadose vitamins, herbal preparations, special teas, acupuncture, massage therapy, magnet therapy, spiritual healing, and meditation.

[consent process](#) (kun-SENT PRAH-ses) Also called Informed consent. A process in which patients are given important information, including possible risks and benefits, about a medical procedure or treatment, a clinical trial, or genetic testing. This is to help them decide if they want to be treated, tested, or take part in the trial. Patients are also given any new information that might affect their decision to continue.

[Cosmegen](#) (KOS-muh-jin) SEE Actinomycin D, above.

[CT scan](#) (... skan) SEE CAT scan, above.

[cumulative dose](#) (KYO-OO-myuh-luh-tiv dose)

In medicine, the total amount of a drug or radiation given to a patient over time; for example, the total dose of radiation given in a series of radiation treatments.

[cumulative exposure](#) (KYO-OO-myuh-luh-tiv ek-SPOH-zher)

The total amount of a substance or radiation that a person is exposed to over time. Cumulative exposure to a harmful substance or radiation may increase the risk of certain diseases or conditions.

[dacarbazine](#) Also called DTIC-Dome, DTIC, DIC, Imidazole Carboxamide. Dacarbazine is used for metastatic malignant melanoma, Hodgkin's disease, soft tissue sarcomas, neuroblastoma, fibrosarcomas, rhabdomyosarcoma, islet cell carcinoma, and medullary carcinoma of the thyroid. [From [chemocare.com](#)]

[dactinomycin](#) (DAK-tih-noh-MY-sin) SEE Actinomycin D, above.

[debulking](#) (dee-BUL-king)

Surgical removal of as much of a tumor as possible. Debulking may increase the chance that chemotherapy or radiation therapy will kill all the tumor cells. It may also be done to relieve symptoms or help the patient live longer. Also called tumor debulking.

[deferred therapy](#) (deh-FURD THAYR-uh-pee) Also called Expectant management.

Closely watching a patient's condition but not giving treatment unless symptoms appear or change, or there are changes in test results. Deferred therapy avoids problems that may be caused by treatments such as radiation or surgery. It is used to find early signs that the condition is getting worse. During deferred therapy, patients may be given certain exams and tests. It is sometimes used in prostate cancer. Also called expectant management.

[definitive treatment](#) (deh-FIH-nih-tiv TREET-ment)

The treatment plan for a disease or disorder that has been chosen as the best one for a patient after all other choices have been considered.

[Dox-SL](#) Also called Doxil, Doxorubicin, Doxorubicin hydrochloride, Doxorubicin hydrochloride liposome, Evacet, Hydorxydaunorubicin, LipoDox, and liposomal doxorubicin hydrochloride.

A form of the anticancer drug doxorubicin that is contained in very tiny, fat-like particles. It may have fewer side effects and work better than doxorubicin. Dox-SL is used to treat ovarian cancer, AIDS-related Kaposi sarcoma, and multiple myeloma in patients whose disease has not gotten better after treatment with other anticancer drugs. It may be used together with other anticancer drugs. It is also being studied in the treatment of other types of cancer. Dox-SL is a type of anthracycline antitumor antibiotic.

[Doxil](#) (DOK-sil) SEE Dox-SL, above.

[doxorubicin](#) (DOK-soh-ROO-bih-sin) SEE Dox-SL, above.

[doxorubicin hydrochloride](#) (DOK-soh-ROO-bih-sin HY-droh-KLOR-ide) SEE Dox-SL, above.

[eligibility criteria](#) (EH-lih-jih-BIH-lih-tee kry-TEER-ee-uh)

In clinical trials, requirements that must be met for an individual to be included in a study. These requirements help make sure that patients in a trial are similar to each other in terms of specific factors such as age, type and stage of cancer, general health, and previous treatment. When all participants meet the same eligibility criteria, it gives researchers greater confidence that results of the study are caused by the intervention being tested and not by other factors.

[enalapril](#) (eh-NA-luh-pril)

An antihypertensive agent that can also be used to slow or prevent the progression of heart disease in people with childhood cancer treated with drugs that may be harmful to the heart.

[Evacet](#) (EH-vuh-set) SEE Dox-SL, above.

[Gamma Knife therapy](#) (GA-muh nife THAYR-uh-pee)

A treatment using gamma rays, a type of high-energy radiation that can be tightly focused on small tumors or other lesions in the head or neck, so very little normal tissue receives radiation. The gamma rays are aimed at the tumor from many different angles at once, and deliver a large dose of radiation exactly to the tumor in one treatment session. This procedure is a type of stereotactic radiosurgery. Gamma Knife therapy is not a knife and is not surgery. Gamma Knife is a registered trademark of Elekta Instruments, Inc.

[GCP](#) Also called Good Clinical Practice.

An international set of guidelines that helps make sure that the results of a clinical trial are reliable and that the patients are protected. GCP covers the way a clinical trial is designed, conducted, performed, monitored, audited, recorded, analyzed, and reported.

[Gleevec](#) (GLEE-vek) Also called Imatinib mesylate and ST1571.

A drug used to treat different types of leukemia and other cancers of the blood, gastrointestinal stromal tumors, skin tumors called dermatofibrosarcoma protuberans, and a rare condition called systemic mastocytosis. It is also being studied in the treatment of other types of cancer. Gleevec blocks the protein made by the bcr/abl oncogene. It is a type of tyrosine kinase inhibitor.

[GW786034](#) Also called Pazopanib hydrochloride and Votrient.

A drug used to treat advanced renal cell carcinoma, which is the most common type of kidney cancer. It is also used to treat advanced soft tissue sarcoma that has been treated with other anticancer drugs. It is being studied in the treatment of other types of cancer. GW786034 may prevent the growth of new blood vessels that tumors need to grow. It is a type of protein tyrosine kinase inhibitor and a type of antiangiogenesis agent.

[helical computed tomography](#) (HEE-lih-kul kum-PYOO-ted toh-MAH-gruh-fee) Also called a spiral CT scan.



A procedure that uses a computer linked to an x-ray machine to make a series of detailed pictures of areas inside the body. The x-ray machine scans the body in a spiral path. This allows more images to be made in a shorter time than with older CT methods. A dye may be injected into a vein or swallowed to help the organs or tissues show up more clearly on the x-ray. Helical computed tomography also creates more detailed pictures and may be better at finding small abnormal areas inside the body. It may be used to help diagnose disease, plan treatment, or find out how well treatment is working.

[helical tomotherapy](#) (HEE-lih-kul toh-mah-THAYR-uh-pee) Also called Tomotherapy.

A type of therapy in which radiation is aimed at a tumor from many different directions. The patient lays on a table and is moved through a donut-shaped machine. The radiation source in the machine rotates around the patient in a spiral pattern. Before radiation, a 3-dimensional (3-D) image of the tumor is taken. This helps doctors find the highest dose of radiation that can be used to kill tumor cells while causing less damage to nearby tissue. Helical tomotherapy is a type of intensity-modulated radiation therapy (IMRT).

[hydroxydaunorubicin](#) (hy-DROK-see-DAW-noh-ROO-bih-sin) SEE Dox-SL, above.

[IFN alpha-2B](#) (... AL-fuh ...) Also called Interferon alfa-2b, Intron A, and Recombinant interferon alfa-2b.

A drug used to treat AIDS-related Kaposi sarcoma in certain patients, hairy cell leukemia, and melanoma that has been removed by surgery. It is also used with other anticancer drugs to treat a certain type of non-Hodgkin lymphoma. IFN alpha-2B is also used to treat some infections caused by viruses, such as the hepatitis C virus. It is being studied in the treatment of other types of cancer and other conditions. IFN alpha-2B is a form of interferon alfa (a substance normally made by cells in the immune system) and is made in the laboratory. It is a type of cytokine and a type of biological response modifier.

[Ifosfamide](#) Also called Ifex.

Ifosfamide is an anti-cancer ("antineoplastic" or "cytotoxic") chemotherapy drug. This medication is classified as an "alkylating agent." Ifosfamide is given through an infusion into a vein (intravenous, IV). The amount of ifosfamide that you will receive depends on many factors, including your height and weight, your general health or other health problems, and the

type of cancer or condition being treated. Your doctor will determine your dose and schedule. [From [chemocare.com](http://chemocare.com)]

[image-guided radiation therapy](#) (IH-mij-GY-ded RAY-dee-AY-shun THAYR-uh-pee) Also called IGRT.

A procedure that uses a computer to create a picture of a tumor to help guide the radiation beam during radiation therapy. The pictures are made using CT, ultrasound, X-ray, or other imaging techniques. Image-guided radiation therapy makes radiation therapy more accurate and causes less damage to healthy tissue.

[imatinib mesylate](#) (ih-MA-tih-nib MEH-zih-layt) SEE Gleevec, above.

[informed consent](#) (in-FORMD kun-SENT) Also called Consent process.

A process in which patients are given important information, including possible risks and benefits, about a medical procedure or treatment, a clinical trial, or genetic testing. This is to help them decide if they want to be treated, tested, or take part in the trial. Patients are also given any new information that might affect their decision to continue.

[Intron A](#) (IN-tron...) SEE IFN alpha-2B, above.

[IORT](#) Also called Intra-Operative Radiation Therapy.

Radiation treatment aimed directly at a tumor during surgery.

[IOUS](#) Also called Intra-Operative UltraSound.

A procedure that uses ultrasound (high-energy sound waves that are bounced off internal tissues and organs) during surgery. Sonograms (pictures made by ultrasound) of the inside of the body are viewed on a computer to help a surgeon find tumors or other problems during the operation.

[late effect](#) (layt eh-FEKT)

A health problem that occurs months or years after a disease is diagnosed or after treatment has ended. Late effects may be caused by cancer or cancer treatment. They may include physical, mental, and social problems and second cancers.

[limb-salvage surgery](#) (lim-SAL-vij SER-juh-ree) Also called Limb-sparing surgery.

Surgery to remove a tumor in a limb (arm or leg) without removing the whole limb. The bone and tissue around the tumor may also be removed, and an implant may be used to replace the part of the limb removed. Limb-salvage surgery is done to help save the use and appearance of the limb. It is used to treat cancers of the bone and soft tissue.

[LipoDox](#) (LY-poh-DOX) SEE Dox-SL, above.

[liposomal doxorubicin hydrochloride](#) (LY-poh-SOH-mul DOK-soh-ROO-bih-sin HY-droh-KLOR-ide) SEE Dox-SL, above.

[magnetic resonance imaging](#) (mag-NEH-tik REH-zuh-nunts IH-muh-jing). Also called MRI, NMRI, and Nuclear magnetic resonance imaging.

A procedure in which radio waves and a powerful magnet linked to a computer are used to create detailed pictures of areas inside the body. These pictures can show the difference between normal and diseased tissue. Magnetic resonance imaging makes better images of organs and soft tissue than other scanning techniques, such as computed tomography (CT) or x-ray. Magnetic resonance imaging is especially useful for imaging the brain, the spine, the soft tissue of joints, and the inside of bones.

[MAID](#)

Chemotherapy consisting of Mesna (below), Doxorubicin (SEE Dox-SL, above), Ifosfamide (above), and Dacarbazine (above). [From

[chemocare.com](#)]

[maintenance therapy](#) (MAYN-teh-nunts THAYR-uh-pee)

Treatment that is given to help keep cancer from coming back after it has disappeared following the initial therapy. It may include treatment with drugs, vaccines, or antibodies that kill cancer cells, and it may be given for a long time.

[maximum tolerated dose](#) (MAK-sih-mum TAH-leh-RAY-ted ...) Also called MTD.

The highest dose of a drug or treatment that does not cause unacceptable side effects. The maximum tolerated dose is determined in clinical trials by testing increasing doses on different groups of people until the highest dose with acceptable side effects is found.

[mean survival](#) (meen ser-VY-vul)

The average length of time from either the date of diagnosis or the start of treatment for a disease, such as cancer, that patients diagnosed with the disease are still alive. In a clinical trial, measuring mean survival is one way to see how well a new treatment works.

[Mesna](#) Also called Mesnex.

Used for the prevention of ifosfamide-induced hemorrhagic cystitis (syndrome of bleeding and irritation of the bladder), and for the prevention of high-dose cyclophosphamide-induced hemorrhagic cystitis. [From [chemocare.com](#)]

[MR](#) Also called Mitotic rate.

A measure of how fast cancer cells are dividing and growing. To find the MR, the number of cells dividing in a certain amount of cancer tissue is counted. MR is used to help find the stage of melanoma (a type of skin cancer) and other types of cancer. Higher MRs are linked with lower survival rates.

[MRI](#) SEE magnetic resonance imaging, above.

[Neulasta](#) (noo-LA-stuh) Also called filgrastim-SD/01 and Pegfilgrastim.

A drug used to increase numbers of white blood cells in patients who are receiving chemotherapy. It is a type of colony-stimulating factor.

[Neumega](#) (noo-MEH-guh) Also called Oprelvekin, Recombinant human interleukin-11, and rhIL-11.

A drug used to increase the number of blood cells, especially platelets, in some cancer patients receiving chemotherapy. Neumega is a form of interleukin-11 (a cytokine normally made by support cells in the bone marrow) that is made in the laboratory. It is a type of biological response modifier.

[nonrandomized clinical trial](#) (non-RAN-duh-mized KLIH-nih-kul TRY-ul) A clinical trial in which the participants are not assigned by chance to different treatment groups. Participants may choose which group they want to be in, or they may be assigned to the groups by the researchers.

[objective improvement](#) (ub-JEK-tiv im-PROOV-ment)

An improvement that can be measured by the health care provider (for example, when a tumor shrinks or there are fewer cancer cells in the blood).

[objective response](#) (ub-JEK-tiv reh-SPONTS)

A measurable response.

[off-label](#) (... LAY-bel)

Describes the legal use of a prescription drug to treat a disease or condition for which the drug has not been approved by the U.S. Food and Drug Administration.

[oprelvekin](#) (oh-PREL-veh-KIN) SEE Neumega, above.

[OS](#) Also called Overall survival.

The length of time from either the date of diagnosis or the start of treatment for a disease, such as cancer, that patients diagnosed with the disease are still alive. In a clinical trial, measuring the OS is one way to see how well a new treatment works.

[paclitaxel](#) (PA-klih-TAK-sil) Also called Taxol.

A drug used to treat breast cancer, ovarian cancer, and AIDS-related Kaposi sarcoma. It is also used together with another drug to treat non-small cell lung cancer. Paclitaxel is also being studied in the treatment of other types of cancer. It blocks cell growth by stopping cell division and may kill cancer cells. It is a type of antimitotic agent.

[paclitaxel-loaded polymeric micelle](#) (PA-klih-TAK-sil-LOH-ded PAH-lih-MAYR-ik MY-sel)

A form of the anticancer drug paclitaxel used to treat breast cancer, ovarian cancer, and AIDS-related Kaposi sarcoma. It is also used with another drug to treat non-small cell lung cancer. Paclitaxel is mixed with very tiny particles of a substance that makes it easier to dissolve in water. This allows higher doses of paclitaxel to be given. It is a type of antimitotic agent.

[palliative care](#) (PA-lee-uh-tiv kayr) Also called Comfort care, Supportive care, and Symptom management

Care given to improve the quality of life of patients who have a serious or life-threatening disease. The goal of palliative care is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment.

[pazopanib hydrochloride](#) (puh-ZOH-puh-nib HY-droh-KLOR-ide) SEE GW786034, above.

[pegfilgrastim](#) (peg-fil-GRAS-tim) SEE Neulasta, above.

PET scan (... skan) Also called Positron Emission Tomography scan. A procedure in which a small amount of radioactive glucose (sugar) is injected into a vein, and a scanner is used to make detailed, computerized pictures of areas inside the body where the glucose is taken up. Because cancer cells often take up more glucose than normal cells, the pictures can be used to find cancer cells in the body.

PET-CT scan (... skan) Also called Positron Emission Tomography-Computed Tomography scan.

A procedure that combines the pictures from a positron emission tomography (PET) scan and a computed tomography (CT) scan. The PET and CT scans are done at the same time with the same machine. The combined scans give more detailed pictures of areas inside the body than either scan gives by itself. A PET-CT scan may be used to help diagnose disease, such as cancer, plan treatment, or find out how well treatment is working.

phase I trial (fayz ... TRY-ul)

The first step in testing a new treatment in humans. These studies test the best way to give a new treatment (for example, by mouth, intravenous infusion, or injection) and the best dose. The dose is usually increased a little at a time in order to find the highest dose that does not cause harmful side effects. Because little is known about the possible risks and benefits of the treatments being tested, phase I trials usually include only a small number of patients who have not been helped by other treatments.

phase I/II trial (fayz ... TRY-ul)

A trial to study the safety, dosage levels, and response to a new treatment.

phase II trial (fayz ... TRY-ul)

A study to test whether a new treatment has an anticancer effect (for example, whether it shrinks a tumor or improves blood test results) and whether it works against a certain type of cancer.

phase II/III trial (fayz ... TRY-ul)

A trial to study response to a new treatment and the effectiveness of the treatment compared with the standard treatment regimen.

phase III trial (fayz ... TRY-ul)

A study to compare the results of people taking a new treatment with the results of people taking the standard treatment (for example, which group has better survival rates or fewer side effects). In most cases, studies move into phase III only after a treatment seems to work in phases I and II. Phase III trials may include hundreds of people.

phase IV trial (fayz ... TRY-ul)

A type of clinical trial that studies the side effects of a treatment after it has been approved and is being marketed. These trials include thousands of people and look for side effects that were not seen in earlier trials. Also called post-marketing surveillance trial.

PICC Also called Peripherally Inserted Central Catheter.

A thin, flexible tube that is inserted into a vein in the upper arm and guided (threaded) into a large vein near the heart called the vena cava. It is used to give intravenous fluids, blood transfusions, and chemotherapy and other drugs, and for taking blood samples. It avoids the need for repeated needle sticks. It is a type of central venous access device.

port Also called a port-a-cath.

An implanted device through which blood may be withdrawn and drugs may be infused without repeated needle sticks.

protocol (PROH-tuh-KOL)

A detailed plan of a scientific or medical experiment, treatment, or procedure. In clinical trials, it states what the study will do, how it will be done, and why it is being done. It explains how many people will be in the study, who is eligible to take part in it, what study drugs or other interventions will be given, what tests will be done and how often, and what information will be collected.

PTSD Also called Post-Traumatic Stress Disorder.

An anxiety disorder that develops in reaction to physical injury or severe mental or emotional distress, such as military combat, violent assault, natural disaster, or other life-threatening events. Having cancer may also lead to PTSD. Symptoms interfere with day-to-day living and include reliving the event in nightmares or flashbacks; avoiding people, places, and things connected to the event; feeling alone and losing interest in daily activities; and having trouble concentrating and sleeping.

quality of life (KWAH-lih-tee ... life)

The overall enjoyment of life. Many clinical trials assess the effects of cancer and its treatment on the quality of life. These studies measure aspects of an individual's sense of well-being and ability to carry out various activities.

[randomized clinical trial](#) (RAN-duh-mized KLIH-nih-kul TRY-ul)

A study in which the participants are assigned by chance to separate groups that compare different treatments; neither the researchers nor the participants can choose which group. Using chance to assign people to groups means that the groups will be similar and that the treatments they receive can be compared objectively. At the time of the trial, it is not known which treatment is best. It is the patient's choice to be in a randomized trial.

[recombinant interferon alfa-2b](#) (ree-KOM-bih-nunt in-ter-FEER-on AL-fuh...) SEE IFN alpha-2B, above.

[remission](#) (reh-MIH-shun)

A decrease in or disappearance of signs and symptoms of cancer. In partial remission, some, but not all, signs and symptoms of cancer have disappeared. In complete remission, all signs and symptoms of cancer have disappeared, although cancer still may be in the body.

[samarium 153](#) (suh-MAYR-ee-um ...)

A radioactive substance used in the treatment of bone cancer and bone metastases (cancers that have spread from the original tumor to the bone). Samarium 153 is a radioactive form of the element samarium. It collects in bone, where it releases radiation that may kill cancer cells. It is a type of radioisotope.

[scan](#) (skan)



A type of test that makes detailed pictures of areas inside the body. A scan may also refer to the picture that gets made during the test. Scans may be used to help diagnose disease, plan treatment, or find out how well treatment is working. There are many different types of scans, including computed tomography (CT) scans, magnetic resonance imaging (MRI) scans, and nuclear medicine scans (such as bone scans and liver scans). CT scans are done with an x-ray machine linked to a computer. MRI scans are done with radio waves and a powerful magnet linked to a computer. Nuclear medicine scans are done with small amounts of radioactive substances that are injected into the body and a special machine that detects the radioactive substance.

[second-line therapy](#) (SEH-kund ... THAYR-uh-pee)

Treatment that is given when initial treatment (first-line therapy) doesn't work, or stops working.

[second-look surgery](#) (SEH-kund ... SER-juh-ree)

Surgery performed after primary treatment to determine whether tumor cells remain.

[short-term side effect](#) (... eh-FEKT)

A problem that is caused by treatment of a disease but usually goes away after treatment ends. Short-term side effects of cancer treatment include nausea, vomiting, diarrhea, hair loss, fatigue, and mouth sores.

[single blind study](#) (SING-gul blind STUH-dee)

A type of clinical trial in which only the doctor knows whether a patient is taking the standard treatment or the new treatment being tested. This helps prevent bias in treatment studies.

[subcutaneous port](#) (SUB-kyoo-TAY-nee-us ...)

A tube surgically placed into a blood vessel and attached to a disk placed under the skin. It is used for the administration of intravenous fluids and drugs; it can also be used to obtain blood samples.

[Taxol](#) (TAK-sol) SEE Paclitaxel, above.

[Thrush](#) SEE Candidosis, above.

[tumor debulking](#) (TOO-mer dee-BUL-king)

Surgical removal of as much of a tumor as possible. Tumor debulking may increase the chance that chemotherapy or radiation therapy will kill all the tumor cells. It may also be done to relieve symptoms or help the patient live longer.

uncontrolled study (UN-kun-TROLD STUH-dee)

A clinical study that lacks a comparison (i.e., a control) group.

unresectable (UN-ree-SEK-tuh-bul)

Unable to be removed with surgery.

Velban (VEL-bun) Also called Velsar and vinblastine sulfate.

A drug used to treat several types of cancer, including breast cancer and a type of gestational trophoblastic tumor that have not gotten better with other treatment, lymphoma, testicular cancer, Kaposi sarcoma, and mycosis fungoides. It is also being studied in the treatment of other types of cancer. Velban blocks cell growth by stopping cell division and may kill cancer cells. It is a type of vinca alkaloid and a type of antimetabolic agent.

Velsar (VEL-sar) SEE Velban, above.

vinblastine sulfate (vin-BLAS-teen SUL-fayt) SEE Velban, above.

vincristine (vin-KRIS-teen)

The active ingredient in a drug used to treat acute leukemia. It is used in combination with other drugs to treat Hodgkin disease, non-Hodgkin lymphoma, rhabdomyosarcoma, neuroblastoma, and Wilms tumor.

Vincristine is also being studied in the treatment of other types of cancer. It blocks cell growth by stopping cell division. It is a type of vinca alkaloid and a type of antimetabolic agent.

vincristine sulfate (vin-KRIS-teen SUL-fayt) Also called Oncovin.

A drug used to treat acute leukemia. It is used in combination with other drugs to treat Hodgkin disease, non-Hodgkin lymphoma, rhabdomyosarcoma, neuroblastoma, and Wilms tumor. Vincristine sulfate is also being studied in the treatment of other types of cancer. It blocks cell growth by stopping cell division. It is a type of vinca alkaloid and a type of antimetabolic agent.

vincristine sulfate liposome (vin-KRIS-teen SUL-fayt LY-poh-some) Also called Liposomal vincristine sulfate and Marqibo.

A form of the anticancer drug vincristine sulfate that is contained inside very tiny, fat-like particles. It may have fewer side effects and work better than vincristine. Vincristine sulfate liposome is used to treat adults with acute lymphoblastic leukemia that is Philadelphia chromosome negative and has come back or has not gotten better with other treatment. It is also being studied in the treatment of other types of cancer. It is a type of vinca alkaloid and a type of antimetabolic agent.

Votrient (VOH-tree-ent) SEE GW786034, above.

watchful waiting (WACH-ful WAY-ting)

Closely watching a patient's condition but not giving treatment unless symptoms appear or change. Watchful waiting is sometimes used in conditions that progress slowly. It is also used when the risks of treatment are greater than the possible benefits. During watchful waiting, patients may be given certain tests and exams. Watchful waiting is sometimes used in prostate cancer. It is a type of expectant management.

Xyotax (ZY-oh-tax) Also called CT-2103, Paclitaxel poliglumex, and Paclitaxel polyglutamate.

A form of the anticancer drug paclitaxel combined with a protein called poliglumex that may have fewer side effects and work better than paclitaxel. It is being studied in the treatment of breast cancer, ovarian cancer, lung cancer, and other types of cancer. It belongs to the family of drugs called mitotic inhibitors.

Zarxio (ZAR-zee-oh) Also called Filgrastim, G-CSF, and Granulocyte colony-stimulating factor.

A colony-stimulating factor that stimulates the production of neutrophils (a type of white blood cell). It is a cytokine that is a type of hematopoietic (blood-forming) agent.