
A - Z of Leukaemia

**A Guide for
Patients**

Leukaemia Care
YOUR Blood Cancer Charity

Introduction

During your blood cancer journey, you will come across a number of medical terms, some which you may have heard before and some which you may not. This booklet helps to define some of those.

You may be feeling unsure or confused about blood cancer, whatever stage of your journey you are at, and so it is important to understand the information you are being told. It may be useful to take this booklet with you to your appointments.

If you are unsure about any more medical terms, speak to your specialist nurse who will be able to explain things in more depth.

This booklet was written by Shirley Aston, and reviewed by Victoria Grandage. It was then updated by our Patient Information Writer Isabelle Leach and peer reviewed by Robert Marcus. Thank you to Thea Wilson for providing valuable feedback as a patient reviewer.

If you would like any information on the sources used for this booklet, please email communications@leukaemiacare.org.uk for a list of references.

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About Leukaemia Care

Leukaemia Care is a national charity dedicated to ensuring that people affected by blood cancer have access to the right information, advice and support.

Our services

Helpline

Our helpline is available 8:30am – 5:00pm Monday - Friday and 7:00pm – 10:00pm on Thursdays and Fridays. If you need someone to talk to, call **08088 010 444**.

Alternatively, you can send a message via WhatsApp on **07500068065** on weekdays 9:00am – 5:00pm.

Nurse service

We have two trained nurses on hand to answer your questions and offer advice and support, whether it be through emailing **nurse@leukaemicare.org.uk** or over the phone on **08088 010 444**.

Patient Information Booklets

We have a number of patient information booklets like this available to anyone who

has been affected by a blood cancer. A full list of titles – both disease specific and general information titles – can be found on our website at **www.leukaemicare.org.uk/support-and-information/help-and-resources/information-booklets/**

Support Groups

Our nationwide support groups are a chance to meet and talk to other people who are going through a similar experience. For more information about a support group local to your area, go to **www.leukaemicare.org.uk/support-and-information/support-for-you/find-a-support-group/**

Buddy Support

We offer one-to-one phone support with volunteers who have had blood cancer themselves or been affected by it in some

way. You can speak to someone who knows what you are going through. For more information on how to get a buddy call **08088 010 444** or email **support@leukaemiacare.org.uk**

Online Forum

Our online forum, **www.healthunlocked.com/leukaemia-care**, is a place for people to ask questions anonymously or to join in the discussion with other people in a similar situation.

Patient and carer conferences

Our nationwide conferences provide an opportunity to ask questions and listen to patient speakers and medical professionals who can provide valuable information and support.

Website

You can access up-to-date information on our website, **www.leukaemiacare.org.uk**.

Campaigning and Advocacy

Leukaemia Care is involved in campaigning for patient well-being, NHS funding and drug and treatment availability. If you would like an update on any of the work we are currently doing or want to know how to get involved, email **advocacy@leukaemiacare.org.uk**

Patient magazine

Our quarterly magazine includes inspirational patient and carer stories as well as informative articles by medical professionals: **www.leukaemiacare.org.uk/communication-preferences/**

Glossary

All words in **red** are the terms you may come across during your blood cancer journey. All words in **green** are how to say them.

A

Acute Leukaemia

A.cute Leu.kae.mi-a

Leukaemia is mainly a cancer of the white blood cells. Acute leukaemia means it progresses rapidly, and usually requires immediate treatment.

Acute Lymphoblastic Leukaemia (ALL)

A.cute Lym.pho.blast-ic
Leu.kae.mi-a

Acute lymphoblastic leukaemia is a cancer of early white blood cells. Normal white blood cells divide and grow in an orderly and controlled way; however, in leukaemia this process is disrupted. This means signals that stop the body making too many cells are ignored. Cells continue to divide but do not mature into normal lymphoid cells.

Acute Myeloid Leukaemia (AML)

A.cute My.e.loid Leu.kae.mi-a

Acute myeloid leukaemia is a type of blood cancer that starts from the myeloid cells in the bone marrow. Myeloid cells have the ability to develop into any of the blood cells (red, white or platelet cells).

Acute Promyelocytic Leukaemia (APL)

A.cute Pro.my.e.lo.cyt-ic
Leu.kae.mi-a

Acute promyelocytic leukaemia is a subtype of acute myeloid leukaemia associated with a high risk of bruising or bleeding. APL is most commonly associated with chromosomes 15 and 17 swapping over. This causes parts from each of these chromosomes to join and create a gene called PML/RARA.

Allogeneic Stem Cell Transplant (Allo-SCT)

All.o.ge.ne.ic Stem Cell Trans.plant

Stem cells are collected from a matching donor and transplanted into the patient to eradicate the disease and restore the patient's immune system.

All-trans Retinoic Acid (ATRA)

All trans re.ti.no.ic Acid

All-trans retinoic acid is a drug for the treatment of APL. It is a form of Vitamin A and is not a chemotherapy drug, but users may experience some side effects including headaches, nausea, dry skin and mouth, bone pain and dry eyes.

Alopecia

Al.o.pec-ia

Hair loss.



Alternative Therapies

These are treatments used instead of conventional western medicine. For example, acupuncture is a type of alternative therapy.

Anaemia

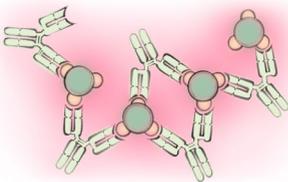
A medical condition in which the red blood cell count or haemoglobin is less than normal.

Antibiotics

These are used to treat or prevent bacterial infections. They work by killing bacteria or preventing them from reproducing and spreading.

Antibodies

A blood protein produced in response to and counteracting a specific antigen. Antibodies combine with substances which they recognise as alien, such as bacteria, viruses and foreign substances in the blood.



Antifungals

A medication that limits or prevents growth of yeasts and other fungal organisms.

Antigen

A toxin or other foreign substance which induces an immune response in the body, especially the production of antibodies.

Aplasia

A.plas-ia

The incomplete or defective development of the usual regenerative process of blood production. This leads to an empty bone marrow.

Arsenic Trioxide (ATO)

Ar.sen-ic Tri.ox-ide

ATO is a chemotherapy drug and is also called Trisenox. It is a treatment for APL.

Autoimmune Disease

A condition arising from an abnormal immune response to a normal body part. Your immune systems attacks healthy cells in your body.

Autologous Stem Cell Transplant (ASCT)

Au.to.lo.gous Stem Cell Trans.plant

A patient's own blood forming cells are collected and returned to the patient following high dose chemotherapy.

B

BCR-ABL gene

A fusion gene that is formed when the ABL gene on chromosome 9 and the BCR gene on chromosome 22 swap part of their DNA. The swap-over, or translocation, forms an abnormal fusion gene called BCR-ABL. This occurs in CML (see on page 12).

Biopsy

[Bi.op.sy](#)

A sample of tissue taken from the body in order to examine it more closely.

Blast Cells

Immature cells found in the bone marrow. They do not fully develop into white cells, red cells and platelets under normal circumstances. In healthy humans, up to 5% of the cells found in the bone marrow are blast cells.

Blood Cells

Blood cells have many different functions including transporting oxygen and nutrients to the lungs and tissues, forming blood clots to prevent excess blood loss and

carrying cells and antibodies that fight infection.

Blood Clot (or Thrombus, or Thrombosis)

A clump of blood that has changed from a liquid to a gel-like or semi-solid state. They are stationary within a vessel or the heart. If it moves from that location through the bloodstream, it is referred to as an embolus.

Blood Count

A common test to check a person's general health or to screen for anaemia.

Blood Transfusion

The transfer of blood or blood components from one person (the donor) into the bloodstream of another person (the recipient). Often a lifesaving technique to replace blood cells or blood products lost through bleeding.

B-Lymphocyte

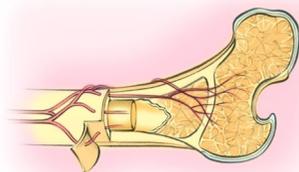
[B lym.pho.cyte](#)

A type of lymphocyte white blood cell which produces antibodies to

fight infection.

Bone Marrow

The soft blood-forming tissue that fills the cavities of bones and contains fat, immature and mature blood cells, including white blood cells, red blood cells, and platelets.



Bone Marrow Aspirate

A sample of soft tissue (liquid) that is taken from the bone marrow.

Bone Marrow Biopsy

A core sample of bone marrow is taken and examined.

Bone Marrow Transplant

A procedure to replace damaged or destroyed bone marrow with

healthy bone marrow cells (stem cells).

C

Cancer

A group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body.

Candida

Can.di.da

A type of yeast. It is the common cause of fungal infections worldwide, but many species are harmless.

Carcinogen

Car.cin.o.gen

A substance capable of causing cancer.

Central Line

A tube which is inserted into a large blood vessel either in the chest or arm so blood samples can be taken easily, and drugs can be given without the use of needles.

Central Nervous System (CNS)

The CNS is part of the nervous system consisting of the brain and spinal cord.

Cerebrospinal Fluid (CSF)

Ce.re.bro.spi.nal Flu-id

A clear, colourless body fluid found around the brain and spinal cord.

Chemotherapy

A form of cancer treatment that uses one or more anticancer drugs as part of a standardised chemotherapy regime.



Chromosomes

A thread-like structure of nucleic acids and proteins found in the nucleus of most living cells. This carries genetic information in the form of genes.

Chronic

A human health condition or disease that is persistent or

otherwise long-lasting in its effects. The term chronic is usually applied when the course of the disease lasts for more than three months.

Chronic Leukaemia

A type of blood cancer that mainly affects the white blood cells. This tends to progress over many years.

Chronic Lymphocytic Leukaemia (CLL)

Chron-ic Lym.pho.cyt-ic
Leu.kae.mi-a

A cancer that affects the blood and bone marrow derived from lymphocytes.

Chronic Myeloid Leukaemia (CML)

Chron-ic My.e.loid
Leu.kae.mi-a

A type of blood cancer of the myeloid cells in the bone marrow. In CML, it is mainly the white blood cells such as the granulocytes that are most likely to multiply. CML involves the presence of the BCR-ABL fusion gene.

Ciclosporin

Ci.clo.spor-in

A drug that inhibits the immune function of the immune system (immunosuppressant) used in organ transplantation to prevent rejection.

Clinical Nurse Specialist

Specialist nurse in cancer care.

Clinical Trial

A medical research study involving patients with the aim of improving treatments and their side effects. You will always be informed if your treatment is part of a trial.



CNS Leukaemia

Leukaemia that affects the central nervous system (CNS).

Coagulation

Co.ag.u.la-tion

The action or process of a liquid, especially blood, changing into a semi-solid state.

Complementary Therapies

These are treatments used alongside conventional western medicine.

Complete Remission

This means that tests, physical examination and scans show that all signs of cancer are gone. No evidence of disease.

Computed Tomography (CT) Scan

A CT scan uses X-rays to make a more detailed picture of your body and the structures inside your body.

Consolidation Treatment

One or more treatments used to kill any cancer cells that may be left in the body. This may include radiation, a stem cell transplant or chemotherapy.

Cord Blood

Umbilical cord blood is blood that remains in the placenta and in the attached umbilical cord after childbirth. Cord blood is collected because it contains stem cells which can be used to treat haematopoietic and genetic disorders.

Corticosteroids

Also called steroids, these are anti-inflammatory medicines used to treat a range of conditions and may have a direct beneficial effect in a number of cancers.

Cryoprecipitate

Cry.o.pre.cip.i.tate

Cryoprecipitate is prepared from fresh frozen plasma and contains fibrinogen, von Willebrand factor, factor VIII, factor XIII and fibronectin, which are required for clotting of the blood. Cryoprecipitate, which is a rich source of fibrinogen, is mainly given to patients with significantly low levels of fibrinogen (<100 mg/dL), who are bleeding or undergoing an invasive procedure such as a biopsy.

Cytogenetics

Cy.to.gen.et-ics

The study of inheritance in relation to structure and function of chromosomes.

Cytopenia

Cy.to.pen-ia

The reduction in the number of blood cells.

Cytoplasm

Cy.to.plas-m

The material or protoplasm within a living cell excluding the nucleus.

D

Deoxyribonucleic Acid (DNA)

A molecule that carries the genetic instructions used in the growth development, functioning and reproduction of all living organisms.

Disseminated Intravascular Coagulation (DIC)

A pathological process characterised by the widespread activation of the clotting cascade. This results in the formation of blood clots in the small vessels throughout the body. This increased clotting uses up the clotting factors in the blood leading to a high risk of serious bleeding, even from a minor injury or without injury.

Diuretic

Di.u.ret-ic

A type of drug used to increase the passing of urine.

Donor Lymphocyte Infusion (DLI)

A type of therapy in which lymphocytes from the blood of a donor are given to a patient who has already received a stem cell transplant from the same donor.

Down's Syndrome

Also known as trisomy 21, this is a genetic disorder, caused by the presence of all or part of the 3rd copy of chromosome 21. Research indicates that those with Down's Syndrome have an increased chance of developing leukaemia.

E

Electrolytes

These are certain nutrients (or chemicals) present in your body that have many important functions.

Erythroleukaemia

E.ry.thro.leu.kae.mi-a

A rare acute form of leukaemia in which there is proliferation of immature red blood cells.

F

Fatigue

Extreme tiredness and weakness rendering the patient unable to work or perform usual activities. Fatigue can be acute and come on suddenly, or chronic and persist.



Fibrinogen

Fi.brin.o.gen

Soluble protein produced by the liver that is present in blood plasma and gets converted into fibrin to form blood clots. The normal range of fibrinogen in the blood is 150-400 mg/dL.

Fluorescence in Situ Hybridisation (FISH)

A test that maps the genetic

materials in a person's cells. The test can be used to visualise specific genes or portions of genes.

French-American-British (FAB) Classification

The FAB classification system refers to series of classification of haematological diseases.

Fresh Frozen Plasma

Fresh frozen plasma is the name for the liquid portion of the blood, which has been frozen to -18°C and stored. It contains all the coagulation factors needed for clotting blood as required. Once defrosted, it is given to patients with clinically significant bleeding, but without major haemorrhage, if they have abnormal coagulation test results.

Full Blood Count (FBC)

A blood test that counts the number of different blood cells.

G

Generic Drug

A pharmaceutical drug that is the equivalent to a brand name product in dosage, strength, route of administration, quality and performance and intended use.



Graft Rejection

This occurs when transplanted tissue is rejected by the recipient's immune system, which destroys the transplanted tissue.

Graft Versus Host Disease (GVHD)

A condition that might occur after an allogeneic stem cell transplant. In GVHD, the donated bone

marrow or peripheral blood stem cells view the recipient's body as foreign.

Graft-versus-leukaemia (GVL) Effect

The GVL effect is a result of the T-cells from the donor being capable of recognising and rejecting the leukaemia cells following an allo-SCT. The GVL effect is important for reducing the risk of relapse.

Granulocyte

Gran.u.lo.cyte

A type of white blood cell which is characterised by the presence of granules in the cytoplasm. They are important for fighting infection, particularly bacterial infections.

H

Haematologist

A doctor who specialises in diseases affecting the blood. They are concerned with any abnormality of the blood, including blood cells and coagulation. Some diseases of the blood include anaemia, leukaemia, lymphoma, polycythaemia and haemophilia.

Haematology

The branch of medicine involving the study and treatment of the blood.

Haematopoiesis (or Haemopoiesis)

Haem.a.to.po.ie.sis

The formation of blood cellular components. All cellular blood components are derived from haematopoietic stem cells.

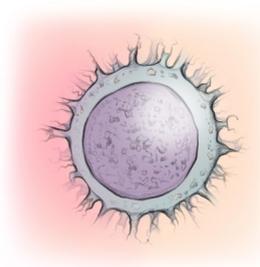
Haemoglobin

The protein molecule in red blood cells that carries oxygen from the lungs to the body's tissues and returns carbon dioxide from

the tissues back to the lungs. Haemoglobin is made up of four protein molecules (globulin chains) that are connected together.

Hairy Cell Leukaemia

Hairy cell leukaemia is one of the rarest types of leukaemia, which is cancer of the B-lymphocyte white blood cells. It gets its name from the fine, hair-like strands around the outside of the cancerous cells, which are visible under a microscope.



Haploidentical Stem Cell Transplant

Hap.lo.i.den.ti-cal Stem Cell Transplant

An allogeneic stem cell transplant (allo-SCT) involves matching a patient's tissue type, specifically their human leukocyte antigen tissue type, with that of a donor. A haploidentical transplant is where the tissue type is a half-match to the patient. This increases the chance of finding a donor as almost everyone has at least one haploidentical relative.

Hepatitis

A disease characterised by inflammation of the liver.

Hickman Catheter

A Hickman line is a central venous catheter most often used for the administration of chemotherapy or other medications, as well as for the withdrawal of blood for analysis. Some types are used mainly for the purpose of apheresis or dialysis. Apheresis

is the process of separating the cellular and soluble components of blood using a machine.

Histology

The study of the microscopic structure of tissues.

Immunophenotyping

Im.mun.o.phen.o.typ.ing

Immunophenotyping is used to help diagnose and classify the blood cell cancers, leukaemias and lymphomas, and to help guide their treatment. Antibodies are used to identify cells by detecting specific antigens on the surface of these cells, which are known as markers.

Immunosuppression

The partial or complete suppression of the immune response, which helps with the survival of an organ after a transplant.

Intensification

The action of making or becoming more intense. In the treatment of leukaemia, intensification means making the remission by patients more intense. Consolidation is also commonly used instead of intensification.

Intrathecal Injection

In.tr.a.the.cal In.jec-tion

A route of administration for drugs via an injection into the CSF within the intrathecal space of the spinal column. It is useful in spinal anaesthesia, chemotherapy, or pain management applications.

Intravenous Injection (IV)

Some medications must be given by an IV injection or infusion. This means they're given directly into your vein using a needle or tube. In fact, the term intravenous means into the vein. With IV administration, a thin plastic tube called an IV catheter is inserted into your vein.

J

Juvenile Myelomonocytic Leukaemia (JMML)

Ju-ven-ile My.e.lo.mon.o.cyt-ic Leu.
kae.mi-a

JMML is a serious chronic leukaemia that affects children under the age of four years. The name JMML now encompasses all diagnoses formerly referred to as juvenile chronic myeloid leukaemia, chronic myelomonocytic leukaemia of infancy and infantile monosomy 7 syndrome.



K

Key Worker

An identified person, usually a nurse, who provides a vital service throughout a patient's cancer journey, acting as a point of contact between the patient and the hospital and providing support throughout the patient's journey.



L

Large Granular Lymphocytic Leukaemia (LGLL)

Large Gran.u.lar Lym.pho.cyt-ic
Leu.kae.mi-a

LGLL is characterised by an excessive production of large granular T-cells and natural killer lymphocytes. LGLL causes neutropenia, anaemia, and/or thrombocytopenia. This condition is often associated with autoimmune disorders, especially rheumatoid arthritis, and other lymphoproliferative disorders.

Late Effects

Late effects are health problems that occur months or years after treatment has ended. Late effects are governed by the treatment received, such as chemotherapy, radiotherapy and surgery, as well as the intensity of that treatment.

Leucocytes

These are white blood cells which circulate in the blood and body fluids and are involved in

counteracting foreign substances and infections. There are several types, including lymphocytes, granulocytes, and monocytes.

Leukaemia

A cancer of the bone marrow/ blood with many different subtypes. Some forms are acute (develop quickly) and others are chronic (develop slowly). Leukaemia is an excess number of abnormal cells in the bone marrow, usually white blood cells, which stop the bone marrow working properly.

Leukaemic Blasts

The most immature cells are found in the bone marrow and are not fully developed. The percentage of blasts in the bone marrow or blood is particularly important. Having at least 20% blasts in the marrow or blood is generally required for a diagnosis of leukaemia.

Lumbar Puncture

A medical procedure where a

needle is inserted into the lower part of the spine to test for conditions affecting the brain, spinal cord or other parts of the nervous system. During the procedure, pressure is measured, and samples of CSF are taken.

Lymph Node or Lymph Gland

An oval-shaped component of the lymphatic system that helps to destroy viruses and bacteria. It contains white blood cells that fight infections.

Lymphocyte

Lym.pho.cyte

A type of white blood cell which forms part of the body's immune system.

M

Magnetic Resonance Imaging (MRI) Scan

MRI scan is a test that uses a magnetic field and pulses of radio wave energy to make pictures of organs and structures inside the body. In many cases, MRI gives different information about structures in the body than can be seen with an X-ray, ultrasound or CT scan.

Malignancy

A malignant tumour is one that is able to locally invade tissues and spread to other sites at a distance from the primary tumour.

Minimal Residual Disease (MRD)

The name given to small numbers of leukaemia cells (cancer cells from the bone marrow) that remain in the patient during treatment, or after treatment when the patient is in remission (no symptoms or signs of the disease). It is the major cause of relapse in cancer and leukaemia.

Monoclonal Antibodies

Antibodies that are made by identical immune cells that are all clones of a unique parent cell. They therefore all bind to the same part of an antigen that is recognised by the antibody.



Mucositis

Oral mucositis is a common complication of chemotherapy. It usually begins five to ten days after the start of chemotherapy and may last up to two weeks. Chemotherapy-induced mucositis causes the mucosal lining of the mouth and gut to atrophy and break down forming ulcers, leading to a sore mouth and diarrhoea. This usually recovers after a further five to seven days.

Multi-Disciplinary Team (MDT)

A meeting of the group of professionals from one or more clinical disciplines who together make decisions regarding recommended treatment of individual patients. MDTs may specialise in certain conditions, such as cancer.

Mutation

The changing of the structure of a gene, resulting in a variant form which may be transmitted to subsequent generations. Mutations are caused by the alteration of single base units in DNA, or the deletion, insertion, or rearrangement of larger sections of genes or chromosomes.

Myelodysplastic Syndromes (MDS)

[My.e.lo.dy.splast-ic Syn.dromes](#)

A group of disorders where bone marrow cells of varying types reproduce abnormally, causing the bone marrow not to make enough healthy blood cells.

Myeloid

[My.e.loid](#)

An adjective that means related to the bone marrow. Myelogenous is sometimes used and means the same as myeloid.

N

Neutropenia

Neu.tro.pen-ia

A condition in which the number of neutrophils (a type of white blood cell) in the bloodstream is decreased.

Neutropenic Sepsis

A life-threatening complication of anticancer treatment, the term is used to describe a severe bacterial infection in a person with no or very few white cells and is regarded as a medical emergency.

Neutrophil

A type of white blood cell that helps fight infection.

O

Oncologist

A doctor who treats cancer. Usually, an oncologist manages a person's care and treatment once he or she is diagnosed with cancer. The field of oncology has three major areas: medical, surgical, and radiation.



P

Pancytopenia

Pan.cyt.o.pen-ia

Deficiency of red cells, white cells and platelets in the blood.

Pathologist

A scientist who studies the causes and effects of diseases, especially one who examines laboratory samples of body tissue for diagnostic or forensic purposes.

Peripheral Blood

This is the circulating flowing blood within which the cellular components of blood, red blood cells (erythrocytes), white blood cells (leucocytes), and platelets, are found.

Peripherally Inserted Catheter (PICC) Line

A PICC line is a soft, long catheter (tube) that is inserted into a vein in your arm, leg or neck. The tip of the catheter is positioned in a large vein that carries blood into the heart. The PICC line is used for long-term IV antibiotics, nutrition

or medications, and for drawing blood.

Petechiae

Pe.tech.iae

Small red or purple spots caused by bleeding into the skin.

Philadelphia Chromosome

The Philadelphia chromosome (or translocation) is a specific genetic abnormality in which a part of chromosome 22 and chromosome 9 are switched. This is found in CML and in some cases of ALL.

Phlebotomists

Phle.bot.o.mist

People trained to draw blood from a patient for clinical or medical testing, transfusions, donations or research.

Phlebotomy

Phle.bot.o.my

Taking of a blood sample from a person.



Plasma Cell Leukaemia (PCL)

PCL is an aggressive form of multiple myeloma characterised by high levels of abnormal plasma cells circulating in the peripheral blood.

Platelet

A tiny, disc-shaped blood cell that assists in blood clotting.

During normal blood clotting, the platelets clump together (aggregate).

Platelet Count

A normal platelet count in a healthy individual is between 150,000 and 450,000 per microlitre of blood.

Polymerase Chain Reaction (PCR)

PCR is a laboratory technique used to make multiple copies of a segment of DNA. PCR is very precise and can be used to amplify, or copy, a specific DNA target from a mixture of DNA molecules.

Portacath

A portacath is a small medical device that is installed beneath the skin to provide venous access for patients who need frequent or continuous administration of chemotherapy. It consists of a thin tube under the skin with the tip sitting just outside the heart and a small disc inserted in the

chest and attached to the tube. Drugs used for chemotherapy are often toxic, and can damage skin, muscle tissue, and sometimes veins.

Positron Emission Tomography (PET) Scan

A PET scan is an imaging test that helps reveal how your tissues and organs are functioning and is used to detect cancer and assess response to therapy. A PET scan uses a small amount of radioactive glucose to highlight sites of activity.

Preleukaemia

Patients with preleukaemia are those who progress to AML such as patients who have a gene mutation that predisposes to AML, and patients with MDS who may progress to AML.

Prognosis

Indication of how well a patient is expected to respond to treatment based on their individual characteristics at the time of

diagnosis or other timepoint of the disease.

Prophylaxis

The treatment given or action taken to prevent disease.

Protocol

A system of rules that explain the correct conduct and procedures to be followed in formal situations.

Purpura

[Pur.pur.a](#)

A rash of red or purple discoloured spots on the skin that do not blanch on applying.

Q/R

Radiotherapy

The use of high energy X-rays to treat cancer. The radiotherapy field is the area of the body being treated. The goal of therapy is that cancer cells are killed within the radiotherapy field.

Red Blood Cell

The blood cell that carries oxygen. Red cells contain haemoglobin, which permits them to transport oxygen to body cells and collect carbon dioxide for disposal.

Refractory Disease

Refractory describes a disease or condition which does not respond to treatment.

Relapse

Relapse occurs when a patient initially responds to treatment, but after six months or more, the disease recurs.

Remission

A period of time when illness is less severe or is not affecting

someone because the cancer cells have been substantially decreased by treatment.

Remission Induction

Initial treatment with anticancer drugs to decrease the number of cancer cells, thereby reducing the signs and symptoms of cancer or making them disappear.

S

Secondary Leukaemia

A collective term used to describe a group of patients with AML or MDS who have a history of environmental, occupational or therapeutic exposure to haematotoxins or radiation.

Sepsis

Sepsis is an extreme type of infection. Sepsis is a potentially life-threatening condition which if not treated immediately can lead to organ failure and death. It affects thousands of patients every year.

Septicaemia

Septi.caem-ia

Septicaemia, also sometimes called blood poisoning, is when bacteria is present in the bloodstream. The bacteria often comes from an existing infection such as pneumonia. If left untreated, septicaemia can progress to sepsis.

Sibling

A sibling is one or two or more individuals having one or both parents in common.

Sinuses

Small, air-filled cavities behind your cheekbones and forehead. The mucus produced by your sinuses usually drains into your nose through small channels. In sinusitis, these channels become blocked because the sinus linings are inflamed (swollen).

Specimen

A small amount or piece that is taken from the body so that it can be tested or examined.

Spleen

The largest organ in the lymphatic system. Similar in structure to a large lymph node it acts primarily as a blood filter and defends the body against infection.

Splenectomy

Spln.ect.o.my

A surgical procedure to remove your spleen. The spleen is an organ that sits under your rib cage on the upper left side of your abdomen. It helps fight infection and filters unneeded material, such as old or damaged blood cells.

Splenomegaly

Spln.o.meg.a.ly

Abnormal enlargement of the spleen.

Staging

Cancer staging is a classification of the cancer according to the size of the cancer and whether and how much it has spread. There are a number of different cancer staging systems. Cancer staging is helpful in determining the best treatment for the patient and the prognosis.

Stem Cell Transplant (SCT)

A stem cell transplant is a

treatment for some types of cancer as well as other blood diseases and disorders of the immune system. A stem cell transplant involves the administration of chemotherapy plus or minus radiotherapy as conditioning followed by infusion of stem cells. The stem cells engraft and form a new immune system.

Stem Cells

The most basic cells in the body that have the potential to develop into many different or specialised cell types.

Subcutaneous Injection

A method of administering medication. Subcutaneous means under the skin. In this type of injection, a short needle is used to inject a drug into the tissue layer between the skin and the muscle.

T

Thrombocytopenia

[Throm.bo.cy.to.pen-ia](#)

A disorder characterised by abnormally low levels of thrombocytes, also known as platelets, in the blood.

Thrombosis

The formation or presence of a blood clot in a blood vessel. The vessel may be any vein or artery. The clot itself is termed a thrombus (see blood clot).

Tissue Typing

To determine the tissue type of a patient. This is the assessment of the immunological compatibility of tissue from separate sources, particularly prior to organ transplantation.

T-lymphocyte (or T-cell)

[T lym.pho.cyte](#)

A T-cell is a type of lymphocyte white blood cell that plays a central role in attacking viruses and other infections. T-cells can be distinguished from other

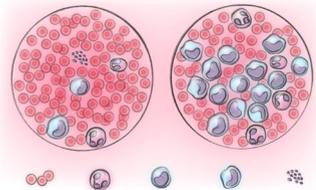
lymphocytes, such as B-cells and natural killer cells, by the presence of a T-cell receptor on the cell surface.

Total Body Irradiation (TBI)

A form of radiotherapy used primarily as part of the preparative regiment for haematopoietic stem cell (or bone marrow) transplantation.

Transformation

Malignant transformation is the process of cells becoming cancerous, or when low grade tumours become more aggressive.



Tyrosine Kinase

A protein or enzyme which controls cellular functions, switching them on and off.

Tyrosine Kinase Inhibitor (TKI)

A drug which blocks the action of a tyrosine kinase (a particular type of enzyme in the cell). In CML, it works mainly by blocking the activity of the BCR-ABL protein.

U

Ultrasound Scan

A procedure that uses high-frequency sound waves to create an image of part of the inside of the body.

V

Virology

The branch of science that deals with the study of viruses.

Virus

A micro-organism, smaller than bacteria, which invades the body cells and uses the cell's chemical machinery to keep itself alive and reproduce as it does not have a cell wall or cytoplasm of its own. Therefore, antibiotics which attack the bacteria's cell walls are not effective for viral infections.

W

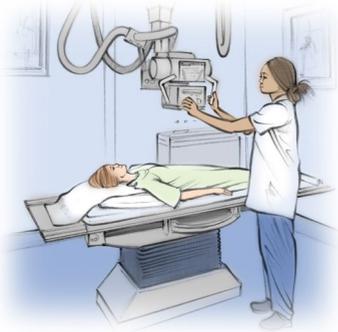
White Blood Cells (or Leucocytes)

These are a type of blood cell that help fight bacteria, viruses, and toxins. They are also involved in inflammatory responses. There are several types of white blood cells. The two most common types are neutrophils and lymphocytes.

X/Y/Z

X-Rays

X-rays are a type of radiation called electromagnetic waves. X-rays are high energy and can pass through the body to an X-ray film creating pictures of the inside of your body. The images show the parts of your body in different shades of black and white.



Useful contacts and further support

There are a number of helpful sources to support you during your diagnosis, treatment and beyond, including:

- Your haematologist and healthcare team
- Your family and friends
- Your psychologist (ask your haematologist or CNS for a referral)
- Reliable online sources, such as Leukaemia Care
- Charitable organisations

There are a number of organisations, including ourselves, who provide expert advice and information.

Leukaemia Care

We are a charity dedicated to supporting anyone affected by the diagnosis of any blood cancer.

We provide emotional support through a range of support services including a helpline, patient and carer conferences, support group, informative website, one-to-one buddy service and high-quality patient information. We also have a nurse on our help line for any medical queries relating to your diagnosis.

Helpline: **08088 010 444**
www.leukaemiacare.org.uk
support@leukaemiacare.org.uk

Bloodwise

Bloodwise is the leading charity into the research of blood cancers. They offer support to patients, their family and friends through patient services.

020 7504 2200
www.bloodwise.org.uk

Cancer Research UK

Cancer Research UK is a leading charity dedicated to cancer research.

0808 800 4040
www.cancerresearchuk.org

Macmillan

Macmillan provides free practical, medical and financial support for people facing cancer.

0808 808 0000
www.macmillan.org.uk

Maggie's Centres

Maggie's offers free practical, emotional and social support to people with cancer and their families and friends.

0300 123 1801
www.maggiescentres.org

Citizens Advice Bureau (CAB)

Offers advice on benefits and financial assistance.

08444 111 444
www.adviceguide.org.uk

Leukaemia Care is a national charity dedicated to providing information, advice and support to anyone affected by a blood cancer.

Around 34,000 new cases of blood cancer are diagnosed in the UK each year. We are here to support you, whether you're a patient, carer or family member.

Want to talk?

Helpline: **08088 010 444**

(free from landlines and all major mobile networks)

Office Line: **01905 755977**

www.leukaemicare.org.uk

support@leukaemicare.org.uk

Leukaemia Care,
One Birch Court,
Blackpole East,
Worcester,
WR3 8SG

Registered charity
259483 and SC039207

Leukaemia Care
YOUR Blood Cancer Charity