Glossary of Commonly Used sAML Terms

A diagnosis of secondary acute myeloid leukemia (sAML) – for yourself or a loved one – may suddenly mean having to learn new words and terms your doctor might be using during appointments.

The following glossary explains some of the terms commonly associated with sAML. You may find it helpful to print this list and bring it to your next doctor's appointment or keep it close by as you navigate the treatment journey.

TERM	DEFINITION
Acute myeloid leukemia (AML)	An aggressive (fast-growing) disease in which too many myeloblasts (immature white blood cells) are found in the bone marrow and blood.[1]
Allogeneic stem cell transplant	The transferring of stem cells from a healthy person (the donor) to the patient's body after high-intensity chemotherapy or radiation. The donated stem cells can come from either a related or an unrelated donor.[1]
AML with myelodysplasia-related changes (AML-MRC)	A type of secondary AML (sAML) that occurs as a result of prior blood disorders, such as myelodysplastic syndromes (MDS). An increase of immature white blood cells in the bone marrow may be a sign that MDS has progressed to sAML.[1]

Aplastic Anemia	A rare but serious blood disorder that occurs when your bone marrow cannot make enough new blood cells for your body to work normally.[13]
Bone marrow	The soft, sponge-like tissue in the center of most bones that produces white blood cells, red blood cells and platelets.[1]
Chemotherapy	A type of treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping them from dividing.[1]
Combination therapy	A therapy that combines more than one method of treatment (also called multimodality therapy and multimodality treatment).[1]
Complete blood count (CBC)	A measure of the number of red blood cells, white blood cells, and platelets in the blood.[1]
Complete remission	The disappearance of all signs of cancer in response to treatment; also known as complete response.[1]
Consolidation therapy	A treatment that is used to kill any cancer cells that remain after induction therapy.[1]
Cytogenetics	A type of testing that uses a microscope to look at cells and determine any abnormalities in the chromosomes.[2]
Deoxyribonucleic acid (DNA)	The molecules inside cells that carry genetic information and pass it from one generation to the next.[1]

Flow cytometry	A method that uses a special machine to measure cell characteristics.[2]
Fluorescent in situ hybridization (FISH)	A method that uses special fluorescent dyes that only attach to specific genes or parts of particular chromosomes, allowing for the detection of changes too small to be seen with cytogenetic testing.[2]
Genetic mutation	A permanent alteration in the DNA sequence that makes up a gene.[9]
Hematocrit	The amount of whole blood that is made up of red blood cells. A hematocrit test is usually part of a CBC test, which may be used to check for conditions such as anemia, dehydration, malnutrition and leukemia.[1]
Hematologist-oncologist	A doctor that diagnoses and treats blood cancers like leukemia.[10]
Hematopoietic stem cell transplant (HSCT)	A type of treatment that infuses the body with a healthy supply of blood-forming cells, most commonly supplied by a donor.[3,6] This treatment helps restore the blood-forming cells that were destroyed by chemotherapy.[3,6]
Hemoglobin	A protein inside red blood cells that carries oxygen from the lungs to tissues and organs in the body and carries carbon dioxide back to the lungs. Testing for the amount of hemoglobin is usually a part of a CBC test.[1]

Hypomethylating agent (HMA)	A type of drug that stops the body from producing cancer cells by interrupting the cell production process in the DNA.[4]
Immunocytochemistry	A method used to look at samples of cells treated with antibodies under a microscope, to see if the antibodies stick (meaning they have these proteins).[2]
Immunosuppressive therapy	A treatment that lowers the activity of the body's immune system. Immunosuppressive therapy may be used to keep a person from rejecting a bone marrow or organ transplant. It may also be used to treat conditions in which the immune system is overactive, such as autoimmune diseases and allergies. Some types of immunosuppressive therapy may increase a person's risk of cancer by lowering the body's ability to kill cancer cells.[1]
Induction therapy	The first treatment given for a disease; also known as first-line therapy.[1]
Myeloblast	A type of white blood cell in the bone marrow that does not mature properly or carry on its normal function.[1]
Myelodysplastic syndromes (MDS)	A type of cancer in which the bone marrow does not make enough healthy blood cells and there are abnormal cells in the blood and/or bone marrow.[1] An increase of immature white blood cells in the bone marrow may be a sign that MDS has progressed to sAML.[12]

Myeloid	Having to do with or resembling bone marrow. May also refer to certain types of hematopoietic (blood-forming) cells found in the bone marrow.[1]
Myeloproliferative neoplasms (MPN)	Blood cancers that occur when the body makes too many white or red blood cells, or platelets. This overproduction of blood cells in the bone marrow can create problems for blood flow and lead to various symptoms.[8]
Pathologist	A doctor who has special training in identifying diseases by studying cells and tissues under a microscope.[1]
Platelet	A type of blood cell made in the bone marrow that helps stop or slow bleeding and heals wounds.[1]
Polymerase chain reaction (PCR)	A sensitive test that is used to find gene and chromosomal changes not visible with a microscope.[2]
Radiation therapy	Radiation therapy (also called radiotherapy) is a cancer treatment that uses high doses of radiation to kill cancer cells and shrink tumors.[11]
Red blood cell	A type of blood cell made in the bone marrow that helps carry oxygen from the lungs to the rest of the body.[1]
Relapse	The return of the signs and symptoms of cancer after a period of improvement.[1]

Secondary AML (sAML)	A type of AML that can be traced back to a preexisting condition or prior cancer treatment.[5] This includes therapy-related sAML (t-AML) or sAML with myelodysplasia-related changes (AML-MRC).[5]
Stem cell	A cell from which other types of cells develop (e.g. blood cells develop from blood-forming stem cells).[1]
Subtype testing	A method to help determine a specific subtype of AML using blood, bone marrow and/or spinal fluid samples.[2] Each subtype is classified based on how mature the myeloblasts are at the time of diagnosis and how they differ from healthy cells.[7]
Therapy-related AML (t-AML)	A type of sAML which occurs as a result of prior treatment with chemotherapy or radiation from other cancers.[1]
White blood cell	A type of blood cell made in the bone marrow and found in the blood and lymph tissue that help the body fight infection and other diseases.[1]

References

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