Facts Adult Patients Should Know

Your Guide to Acute Lymphoblastic Leukemia (ALL)



What is ALL?

Acute lymphoblastic leukemia (ALL) is a rapidly progressing cancer that starts in the bone marrow and spreads into the blood.¹

Today, ALL represents 12% of all leukemia cases. This fast-growing cancer appears when too many young white blood cells (lymphoblasts) are made from the bone marrow, creating leukemia cells.²

Once leukemia cells develop, they multiply rapidly, taking up bone marrow and overtaking healthy blood cells that the body needs.³

While most cases of ALL occur in children, the risk for developing ALL declines slowly until the mid-20s, and begins to rise again slowly after age 50.4 In more severe cases, ALL can move off of the bone marrow and into the bloodstream, spreading to other parts of the body and creating potentially life-threatening risks for patients.⁵



How is it treated?

ALL treatment typically involves three phases and can last 2 to 3 years.

- 1 Induction (Typically lasts one month):
 - The goal of this phase is to clear leukemia cells from the bone marrow.
 - At the end of the induction phase, normal bone marrow should recover and make blood.
 - A hospital stay may be required for the majority of this phase.⁶
- 2 Consolidation (Typically lasts 4 to 8 months):
 - This phase starts after there is complete remission to increase the chance of a cure.⁷
 - Treatment given during this phase is at a higher dose to kill any leukemic cells that may remain in the the body.
- 3 Maintenance (Typically lasts 2 to 3 years):
 - The goal of this phase is to ensure that ALL does not return.
- While treatment can last a while, it is given in an outpatient setting.⁸
- Treatment given during this phase is at lower doses which tend to have less side effects.

Treatment options can be affected by the patient's ALL subtype, age and overall health status.9

- Treatment of ALL typically lasts for about 2-3 years. It is often intense, especially in the first few months of treatment, so it's important that you are treated in a center that has experience with this disease.¹⁰
- ALL is often treated with chemotherapy drugs that kill cancer cells and keep them from coming back. Different types of chemotherapy drugs work differently to kill leukemia cells or prevent new cells from forming.
- Treatment will vary from patient to patient based on an individual's medical history, needs, and situation. Often times, more than one drug will be used.¹¹ Other possible ALL treatments include targeted therapy, immunotherapy, surgery, radiation therapy or a stem-cell transplant.¹²

The goal of ALL treatment is complete remission. A patient is considered to be in remission when all of the following occur: ¹³

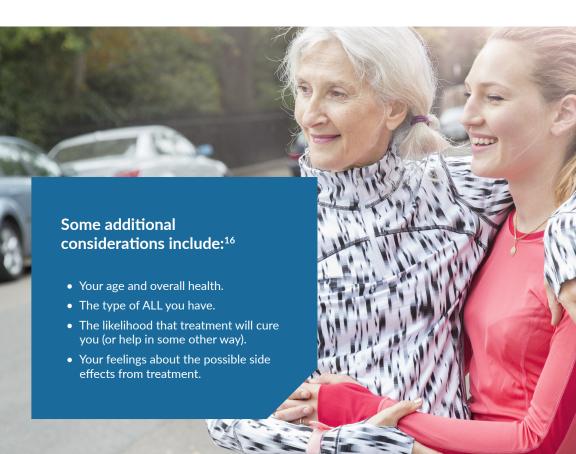
- No leukemia cells are seen in your bone marrow with a microscope.
- No more than 5 out of 100 cells in your bone marrow are immature blood cells (called blast cells).
- No blast cells are in your bloodstream.
- All blood cell counts are back to normal.
- All signs and symptoms of ALL are gone.

No single treatment practice is best for all patients. By being more involved in the treatment process, pediatric patients and their caregivers can more easily share concerns and goals with their healthcare team.

How does my age affect my treatment plan?

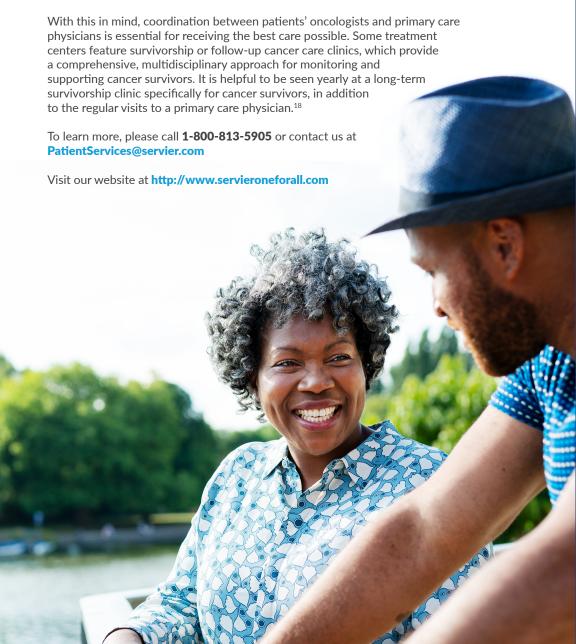
The main treatment for ALL in adults is typically long-term chemotherapy. In recent years, doctors have begun to use more intensive chemotherapy regimens, which has led to greater responses to treatment. Unfortunately, while certainly more effective, these newer regimens are also more likely to cause side effects, such as low white blood cell counts. Adult patients may need to take other drugs to help prevent or treat these side effects.¹⁴

- The first month of ALL treatment is intensive and requires multiple visits to the
 doctor. Patients may even spend some or much of their first month in the hospital,
 because serious infections or other complications can occur. This is also why it's very
 important to take all medicines as prescribed.¹⁵
- Before beginning your treatment, it's important to discuss all of your available options, as well as their corresponding side effects, with your treatment team to help make the decision that best fits your needs.



What about Survivorship?

While ALL is highly treatable, some patients may experience long-term effects or late effects from the disease and/or treatment. This is why survivorship in ALL begins the day of diagnosis and continues throughout life, even for a patient in remission. It is considered one of the most complex aspects of the cancer experience because it is different for every patient.



References

- American Cancer Society. About Acute Lymphocytic Leukemia (ALL). https://www.cancer.org/cancer/acute-lymphocytic-leukemia/about/what-is-all.html Accessed April 13, 2020.
- National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- 4. American Cancer Society. Key Statistics for Acute Lymphocytic Leukemia (ALL). https://www.cancer.org/cancer/acute-lymphocytic-leukemia/about/key-statistics.html
- National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- 8. National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- American Cancer Society. Treating Acute Lymphocytic Leukemia. https://www.cancer.org/content/dam/CRC/PDF/Public/8672.00.pdf. Accessed April 13, 2020.
- American Cancer Society. About Acute Lymphocytic Leukemia (ALL). https://www.cancer.org/cancer/acute-lymphocytic-leukemia/about/what-is-all.html Accessed April 13, 2020.
- National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- American Cancer Society. Treating Childhood Leukemia. https://www.cancer.org/content/dam/CRC/PDF/Public/8696.00.pdf. Accessed April 2020.
- National Comprehensive Cancer Network. "Acute Lymphoblastic Leukemia." NCCN Guidelines for Patients. 2019. https://www.nccn.org/patients/guidelines/content/pdf/all-patient.pdf. Accessed December 2020.
- American Cancer Society. About Acute Lymphocytic Leukemia (ALL). https://www.cancer.org/cancer/acute-lymphocytic-leukemia/about/what-is-all.html Accessed April 13, 2020.
- American Cancer Society. About Acute Lymphocytic Leukemia (ALL). https://www.cancer.org/cancer/acute-lymphocytic-leukemia/about/what-is-all.html Accessed April 13, 2020.
- American Cancer Society. About Acute Lymphocytic Leukemia (ALL). https://www.cancer.org/cancer/acute-lymphocytic-leukemia/about/what-is-all.html Accessed April 13, 2020.
- 17. Leukemia & Lymphoma Society. Follow-Up Care and Survivorship. https://www.lls.org/managing-yourcancer/follow-up-care-and-survivorship. Accessed April 2020.
- Leukemia & Lymphoma Society. Follow-Up Care and Survivorship. https://www.lls.org/managing-yourcancer/follow-up-care-and-survivorship. Accessed April 2020.

