

Our Lifesaving Investment in Research

At The Leukemia & Lymphoma Society (LLS), we have been fighting blood cancers by advancing breakthrough research leading to treatments and cures for almost 70 years. Our work has helped millions impacted by cancer.

We focus on FINDING CURES

THIRD

leading cancer killer of

Americans

Blood cancers are the third leading cancer killer of Americans. At LLS, we are focused on finding cures.

- We prioritize research based on unmet medical needs, and support it at every stage—from bench to bedside.
- LLS has played a role in advancing nearly every breakthrough in blood cancer research today, including immunotherapy, genomics, and precision medicine.

We fund RESEARCH to advance lifesaving blood cancer treatments

- LLS funds the most innovative research because this foundational work has proven time and time again that this is the fastest way to cure blood cancer.
- And we partner with medical institutions, pharmaceutical and biotechnology companies, professional healthcare organizations and other key players across the cancer landscape to accelerate the development of new therapies.

OUR INNOVATIVE & COLLABORATIVE RESEARCH PROGRAMS

Career Development Program: Supporting promising investigators in their developing careers	Specialized Center of Research: Funding teams across different areas of expertise to discover new approaches
Translational Research Program: Bringing promising preclinical research from the lab to clinical development	Therapy Acceleration Program: Partnering with biotechnology companies and academic institutions to help accelerate therapies
Screen To Lead/Quest For Cures: Funding innovative approaches to bolster drug discovery	Special Collaborations: Collaborating to accelerate research, stimulate innovation and solve challenges

This INNOVATIVE research also benefits the broader cancer community

- Many of the innovative approaches to cancer treatment, including advances in immunotherapy, genomics and precision medicine, were first discovered in blood cancers.
- The drugs and treatments we developed for blood cancers have helped people affected by many different types of cancers and other diseases.

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Research Highlights: We bring new treatment options to patients

Beat AML®: On the Offensive against Acute Myeloid Leukemia (AML)

In 2016, we launched the Beat AML® Master Clinical Trial. AML is deadly, and there has been little change in treatment for AML patients for more than 40 years. Beat AML® is:

- A groundbreaking collaboration convening researchers, cancer centers, pharmaceutical companies, and the U.S. Food and Drug Administration (FDA) to simultaneously test several new therapies for AML
- A precision medicine approach to treatment in which patients are assigned to a targeted therapy based on their genetic profile

The trial enrolls newly diagnosed patients who are 60+ years of age since these patients are unable to tolerate standard chemotherapy and have few other options.

CAR T-Cell Immunotherapies: A Historic Victory for Patients

In 2017, the FDA approved two revolutionary therapies called CAR (chimeric antigen receptor) T-cell immunotherapies. This treatment uses cutting-edge genetic engineering technology to harness a patient's T-cells, the soldiers of the immune system, to be genetically reprogrammed to find and kill cancer cells. These therapies are now helping certain leukemia and lymphoma patients who relapsed or did not respond to existing treatments. Our investments helped make this possible:

- \$21 million over two decades in the work of CAR-T pioneer Carl June, M.D., of the University of Pennsylvania led to tisagenlecleucel (Kymriah™) for acute lymphoblastic leukemia (ALL)
- \$2.5 million in the Kite, a Gilead Company, clinical trial led to xicabtagene ciloleucel (Yescarta™) for certain types of large B-cell lymphoma.

Therapy Acceleration Program ® (TAP)

As part of a strategic initiative, LLS partners with biotechnology companies and academic institutions to help accelerate the development of promising therapies. FDA approved two of these therapies in 2017:

- CPX-351 (Vyxeos™), an innovative reformulation of two chemotherapies, for high-risk AML patients
- Axicabtagene ciloleucel (Yescarta™), a CAR T-cell immunotherapy for adults with certain types of non-Hodgkin lymphoma who are not responding to other treatment

LLS's research team is comprised of doctorate level experts who design, implement and evaluate our grants and research programs. All grant applications and partnership agreements are reviewed and awarded with advisory input from recognized biomedical research experts.

