

Spotlight on Leukemias

Leukemia is a broad term for cancers that start in blood-forming tissue and causes large numbers of abnormal blood cells to be produced and enter the bloodstream.

An estimated 66,890 new cases of leukemia were diagnosed in the U.S. in 2025. The five-year relative survival rate is 68%.



Our Impact on Leukemia Research

We've funded

182 grants totaling over \$63.6 million.[†]

V Foundation funded researchers, over their careers, have:

Received

over 1,100 grants and \$9.54 billion in funding.*

Produced

over 17,700 publications.*

Worked on

171 clinical trials.*

[†]adult blood cancer research

*adult and pediatric blood cancer research

V Foundation Funded Researchers – Proven Positive Impact

- **Luisa Cimmino, Ph.D.**, who received a 2021 Designated Early Career Investigator award grant at the Sylvester Comprehensive Cancer Center, explores how vitamin C might help treat adult leukemia by focusing on a protein called TET2 (which helps regulate how our genes are expressed) and its role in modifying DNA to regulate gene activity.
- TET proteins help remove methyl groups, reactivating genes so our cells can make important proteins they need to function properly. However, in many blood cancers like leukemia, TET2 is often mutated and can't perform its function properly, leading to abnormal growth of blood cells seen in cancer.
- Dr. Cimmino and her team found that vitamin C can enhance the activity of TET2, even when it's only partially functional due to mutations. This helps promote DNA demethylation and reactivate silenced genes.
- The team also discovered that combining vitamin C with other treatments, like PARP inhibitors (a type of medication to fight cancer), increased the amount of cancer cell death, suggesting a promising new approach for leukemia patients with TET2 mutations.



*Luisa Cimmino, Ph.D.,
2021 Designated Early Career
Investigator Award Grantee*