

# CLN-049: A New and Differentiated Approach to Acute Myeloid Leukemia Treatment

## Unmet Need in Acute Myeloid Leukemia (AML)

- AML is a cancer of the blood and bone marrow and patients often face poor outcomes.<sup>1,2,3</sup> Although AML is the most common form of acute leukemia in adults, it is difficult to treat, and patients urgently need treatment options that are safer and longer-lasting.<sup>1,2,3</sup>
- Despite the recent availability of targeted therapies for some patients, many patients either lack a mutation that responds to these therapies or may relapse despite treatment, underscoring the fragmented and limited reach of current precision approaches to care.<sup>3</sup>
- Even with recent advances in treatment, AML is the only blood cancer for which there are no approved immunotherapies.<sup>4</sup>
- T cell engagers have the potential to be one of the first immunotherapeutic medicines for AML that offer the possibility for improved outcomes, which could transform how the disease is treated.<sup>4</sup>

“For too long, people living with acute myeloid leukemia have carried the weight of a diagnosis with too few options and outcomes that are often difficult to bear. The need for new treatments that are more effective and easier to tolerate is urgent. Every new advance — every expanded possibility — brings real hope to patients and the people who love them, paving the way toward a better tomorrow for all those impacted by AML.”

- Peggy Ann Torney, CEO, MDS Foundation



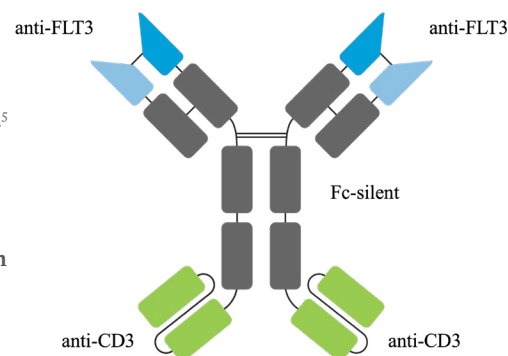
## What is CLN-049?

### About The Molecule:

- CLN-049 is a **T cell engager** currently being evaluated in clinical studies for individuals living with AML.
- T cell engagers use a patient's own immune system to find and destroy cancer cells.<sup>4</sup>

### A New Way to Target FLT3 in AML:

- ▶ CLN-049 targets **FLT3**, a protein found on cancer cells in over 80% of people living with AML.<sup>5</sup>
- ▶ Rather than blocking FLT3's activity, CLN-049 uses FLT3 as a marker, a kind of “flag” that helps the immune system recognize and eliminate the leukemia cells.
- ▶ CLN-049 can bind to both mutated and non-mutated FLT3, meaning more patients could be eligible for treatment. This wide applicability offers the potential to reach a **broad population** of individuals living with AML.
- ▶ Meanwhile, currently available FLT3 inhibitors, a different type of treatment, only work for the subset of AML that has specific FLT3 mutations.<sup>5</sup>
- ▶ The safety profile of T cell engagers is well established in other blood cancers, and T cell engagers could be a practical approach for older adults or those who cannot tolerate intensive treatments like chemotherapy or a bone marrow transplant.<sup>6</sup>



**The goal of our CLN-049 program is to improve survival and quality of life for those living with AML who have limited treatment options.**

## Clinical Trials and Next Steps

- CLN-049 is being researched in Phase 1 clinical studies for people living with AML that have not responded to treatment and for those with high-risk myelodysplastic syndrome.
- These early studies are focused on evaluating safety and efficacy of CLN-049, with the potential to provide a new standard of care.



Visit [ClinicalTrials.gov](https://ClinicalTrials.gov) (NCT05143996) or scan the QR code to learn more about the CLN-049 clinical trial

### References

1. American Association for Cancer Research. (2025). Acute Myeloid Leukemia.
2. National Cancer Institute. (2025). Acute Myeloid Leukemia Treatment (PDQ®)—Patient Version.
3. Moore, CG., et al. (2025). Treatment of Relapsed/Refractory AML—Novel Treatment Options Including Immunotherapy. *Am J Hematol.* (100)2.
4. Daws, H., et al. (2025). T-Cell Engagers in Acute Myeloid Leukemia: Molecular Targets, Structure, and Therapeutic Challenges. *Cancers*, 17(19), 3246.
5. Mehta, N., et al. (2022). A novel IgG-based FLT3xCD3 bispecific antibody for the treatment of AML and B-ALL. *Journal for Immunotherapy of Cancer*, 10(1), e003882.
6. McLoughlin, A., et al. (2025). Minimising Toxicity and Maximising Response: T-Cell Engagers for Elderly Patients with Multiple Myeloma. *Lymphatics*, 3(2), 14.