



Cycuria Therapeutics Publishes Groundbreaking Research in *Science Translational Medicine* Demonstrating Lymphotoxin Alpha Eradicates Acute Myeloid Leukemia

- *Cycuria's scientific founder, Prof. Dr. Philipp Jost, and his team have uncovered a natural tumor-suppressing mechanism involving the secretory protein lymphotoxin alpha (LTA).*
- *Their paper in Science Translational Medicine elucidates how LTA selectively and potently eliminates leukemic stem cells (LSCs) in AML without affecting healthy hematopoiesis.*
- *Cycuria's lead program, CUR-101, a synthetic biologic based on LTA, is advancing through preclinical development and the underlying research will be featured in a poster at the upcoming ASH Annual Meeting (Dec 6–9, 2025).*

Graz, Austria, 26 November 2025 – Cycuria Therapeutics (Cycuria), a preclinical-stage biotechnology company pioneering protein-based targeted therapies for hematological cancers, today announced the publication of its latest research in *Science Translational Medicine*, titled “*Lymphotoxin alpha eradicates acute myeloid leukemia and simultaneously promotes healthy hematopoiesis.*”

The study, led by Cycuria's scientific founder, Prof. Dr. Philipp Jost, a clinician-scientist, and his research team, describes a natural tumor-suppressing mechanism mediated by lymphotoxin alpha (LTA). The team demonstrated that LTA selectively eliminates disease-causing leukemic stem cells (LSCs) in acute myeloid leukemia (AML) while sparing healthy blood-forming cells.

Key findings include:

- **Critical role of LTA:** Genetic deletion of LTA in mouse models accelerates leukemia progression, highlighting its tumor-suppressive function.
- **Selective eradication of LSCs:** LTA effectively targets leukemic stem cells in vitro and in vivo, including analyses of primary AML patient samples.
- **Promotion of healthy hematopoiesis:** LTA stimulates the development of hematopoietic progenitor stem cells, supporting healthy blood cell production.
- **Broad applicability:** LTA's anti-leukemic activity was observed across diverse AML mutational profiles, suggesting potential efficacy irrespective of the genetic background of the disease.
- **Minimal toxicity:** Unlike conventional therapies, LTA showed minimal impact on healthy blood cells and even promoted their growth.

Prof. Dr. Philipp Jost remarked: “*These results highlight a novel therapeutic strategy that directly eradicates cancer stem cells across diverse AML genetic backgrounds while sparing healthy cells. Our findings provide a strong foundation for the development of CUR-101, our synthetic LTA-based biologic, which could offer more effective and less toxic treatments for leukemia patients.*”



Dr. Nisit Khandelwal, CEO of Cycuria Therapeutics, added: *“We are thrilled to see the scientific rigor and translational potential of this research recognized in a top-tier journal. These findings reinforce our commitment to developing transformative therapies for patients with AML and CUR-101 represents a promising step towards delivering a first-in-class treatment that could change the standard of care.”*

Cycuria will be presenting a poster on these findings at the **American Society of Hematology (ASH) Annual Meeting** in Florida, December 6–9, 2025.

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About Cycuria Therapeutics

Cycuria Therapeutics is a preclinical-stage oncology startup based in Graz, Austria, founded by scientists from the Medical University of Graz, TU Munich and the University of Heidelberg. We are pioneering a novel protein-based targeted therapy for haematological cancers and beyond.

Our approach selectively targets tumour cells and tumour stem cells while preserving healthy haematopoiesis and overall physiology. This enables durable efficacy with a significantly improved safety profile compared to current treatment options, as demonstrated in preclinical animal models and patient-derived disease models.

By combining excellent tolerability with long-lasting efficacy, our novel therapeutic strategy aims to address significant unmet needs in cancer treatment, offering a new solution where conventional therapies have fallen short.

For more information, visit: <https://cycuria.com/>

About acute myeloid leukaemia (AML)

AML is a rapidly progressive disease of the haematopoietic system, characterised by abnormal growth of immature white blood cells in the bone marrow. Despite advancements in treatment, AML remains a significant clinical challenge, with high relapse rates and poor long-term survival, especially in older patients and those with high-risk mutations. Current therapies, including chemotherapy and stem cell transplantation, are often associated with severe side effects and high relapse rates. AML has a high incidence rate, especially in those over 60 years old, with around 200,000 new cases of AML diagnosed globally every year. Just one in five AML patients survive longer than three years after diagnosis.