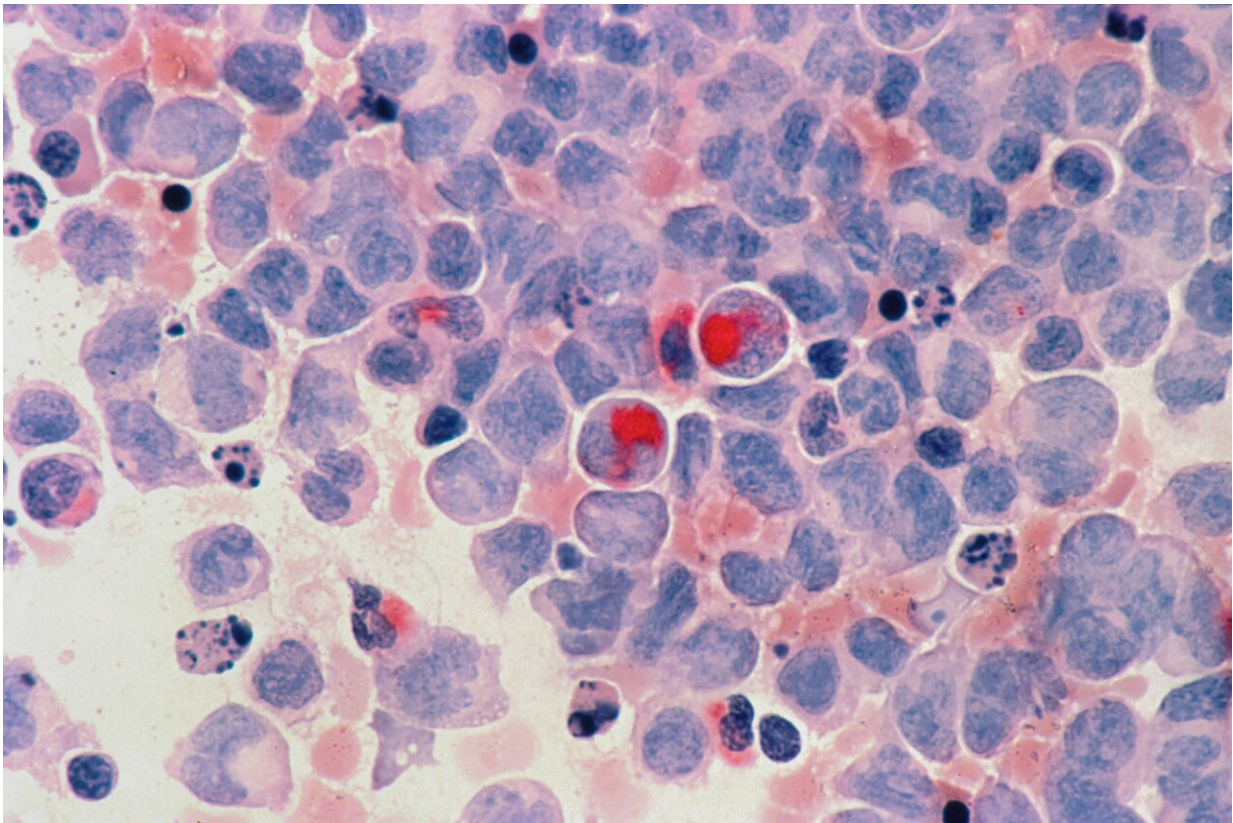


Reductive carboxylation of glutamine as a potential target in acute myeloid leukemia

January 16 2024



Credit: Unsplash/CC0 Public Domain

A new editorial paper was published in *Oncotarget* titled, "[Reductive carboxylation of glutamine as a potential target in acute myeloid leukemia.](#)"

In this new editorial, researchers Alessia Roma, Lawrence D. Goodridge, and Paul A. Spagnuolo from the University of Guelph discuss [acute myeloid leukemia](#) (AML)—an aggressive cancer of the blood and bone marrow defined by poor patient outcomes and sub-optimal therapeutics.

Recent advancements in our understanding of AML biology bring optimism to improving patient outcomes for this devastating disease. For example, discovering and validating metabolic vulnerabilities distinct to AML opens new strategies for novel drug development.

In fact, since 2017, a third of newly approved AML therapeutics have targeted metabolic abnormalities. Thus, further identification and elucidation of metabolic vulnerabilities in AML could lead to novel therapies to improve patient outcomes.

"One approach is to weaken tumor cell survival mechanisms. In this regard, exploring reductive carboxylation as a possible drug target could provide new avenues for optimizing existing treatments aimed at improving AML patient outcomes," the researchers conclude.

More information: Alessia Roma et al, Reductive carboxylation of glutamine as a potential target in acute myeloid leukemia, *Oncotarget* (2023). [DOI: 10.18632/oncotarget.28474](https://doi.org/10.18632/oncotarget.28474)

Provided by Impact Journals LLC

Citation: Reductive carboxylation of glutamine as a potential target in acute myeloid leukemia (2024, January 16) retrieved 28 April 2024 from <https://medicalxpress.com/news/2024-01-reductive-carboxylation-glutamine-potential-acute.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.