

New potential drug suppresses chemotherapy-induced pain

December 6 2023



Credit: Unsplash/CC0 Public Domain

Onco Investigator Mario van der Stelt and his lab discovered a potential new drug that suppresses chemotherapy-induced neuropathic pain. The results are [published](#) in *Nature Communications*.

Neuropathic pain is a common side effect of chemotherapy and one of the major reasons for discontinuation of the treatment. LEI-515 is a substance that stops the breakdown of a natural compound in our bodies that's similar to a component found in marijuana (2-arachidonoylglycerol).

LEI-515 reduced the neuropathic pain caused by a chemotherapeutic drug called paclitaxel in a mouse model. Unlike some medications or substances, LEI-515 doesn't cause [behavioral changes](#) (psychoactive effects) or lead to physical dependence in mice.

This study provides a basis for creating new pain-relief drugs (analgesics) with fewer side effects for [cancer patients](#).

Mirjam Huizenga, first author of the paper, explains, "Cancer patients that suffer from chemotherapy-induced [neuropathic pain](#) are in dire need for effective medication without side effects, and our study provides promising results towards that goal."

More information: Ming Jiang et al, A monoacylglycerol lipase inhibitor showing therapeutic efficacy in mice without central side effects or dependence, *Nature Communications* (2023). [DOI: 10.1038/s41467-023-43606-3](#)

Provided by Leiden University

Citation: New potential drug suppresses chemotherapy-induced pain (2023, December 6) retrieved 11 May 2024 from <https://medicalxpress.com/news/2023-12-potential-drug-suppresses-chemotherapy-induced-pain.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.