

Cola intake increases exposure of erlotinib

February 10 2016



(HealthDay)—Cola intake leads to a clinically relevant and statistically significant increase in the bioavailability of erlotinib during esomeprazole treatment, according to a study published online Feb. 8 in

the *Journal of Clinical Oncology*.

Roelof W.F. van Leeuwen, Pharm.D., from the Erasmus Medical Center Cancer Institute in Rotterdam, Netherlands, and colleagues conducted a randomized, cross-over, pharmacokinetic study of 28 patients with [non-small-cell lung cancer](#). Inpatient differences were evaluated for absorption (area under the plasma concentration time curve [AUC_{0-12h}]) after a seven-day period of concomitant treatment with [erlotinib](#), with or without esomeprazole, with either [cola](#) or water.

The researchers found that in patients treated with erlotinib and esomeprazole with cola, the mean AUC_{0-12h} increased 39 percent ($P = 0.004$). However, in patients not treated with esomeprazole, the mean AUC_{0-12h} was only slightly higher (9 percent; $P = 0.03$) after erlotinib intake with cola.

"Potentially, the effects of cola on erlotinib exposure may be extrapolated to other [tyrosine kinase inhibitors](#) with a pH-dependent solubility (e.g., dasatinib, gefitinib, nilotinib), but this remains to be evaluated in future studies," the authors write. "Furthermore, other acidic beverages (i.e., orange juice, other carbonated drinks) may have similar effects as cola and should be explored in future trials."

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2016 [HealthDay](#). All rights reserved.

Citation: Cola intake increases exposure of erlotinib (2016, February 10) retrieved 3 May 2024 from <https://medicalxpress.com/news/2016-02-cola-intake-exposure-erlotinib.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.