

SGLT-2i use before COVID-19 may reduce adverse outcomes in diabetes patients

December 7 2022, by Elana Gotkine



For patients with diabetes subsequently diagnosed and hospitalized with

COVID-19, use of a sodium-glucose cotransporter-2 inhibitor (SGLT-2i) before COVID-19 infection is associated with lower COVID-19-related adverse outcomes, according to a systematic review and network meta-analysis published online Dec. 6 in *JAMA Network Open*.

Zheng Zhu, from the Shengli Clinical Medical College of Fujian Medical University in Fuzhou, China, and colleagues examined the association between COVID-19-related adverse outcomes and eight antihyperglycemic drugs in patients with diabetes subsequently diagnosed and hospitalized with COVID-19 in a review and meta-analysis. Data were included from 31 [observational studies](#), with 3,689,010 patients with diabetes hospitalized for COVID-19.

The researchers found that compared with insulin, dipeptidyl peptidase-4 inhibitors, secretagogues, and glucosidase inhibitors, the SGLT-2is were associated with relatively lower risks for adverse outcomes (log of odds ratios [95 percent credible intervals], 0.91 [0.57 to 1.26], 0.61 [0.28 to 0.93], 0.37 [0.02 to 0.72], and 0.50 [0.00 to 1.01]). SGLT-2is were associated with the lowest probability for adverse outcomes followed by glucagon-like peptide 1 receptor agonists and metformin based on the surface under the cumulative ranking curves value (6, 25, and 28 percent, respectively). The study was deemed reliable in a sensitivity analysis.

"Our results suggest that compared with other diabetes drugs, the use of SGLT-2is before COVID-19 infection in patients with diabetes was associated with a lower incidence of [adverse outcomes](#) after infection, which may be associated with improving blood glucose level, [blood pressure](#), body weight, and lipid metabolism," the authors write.

More information: [Abstract/Full Text](#)

Copyright © 2022 [HealthDay](#). All rights reserved.

Citation: SGLT-2i use before COVID-19 may reduce adverse outcomes in diabetes patients (2022, December 7) retrieved 5 May 2024 from <https://medicalxpress.com/news/2022-12-sgl-2i-covid-adverse-outcomes-diabetes.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.