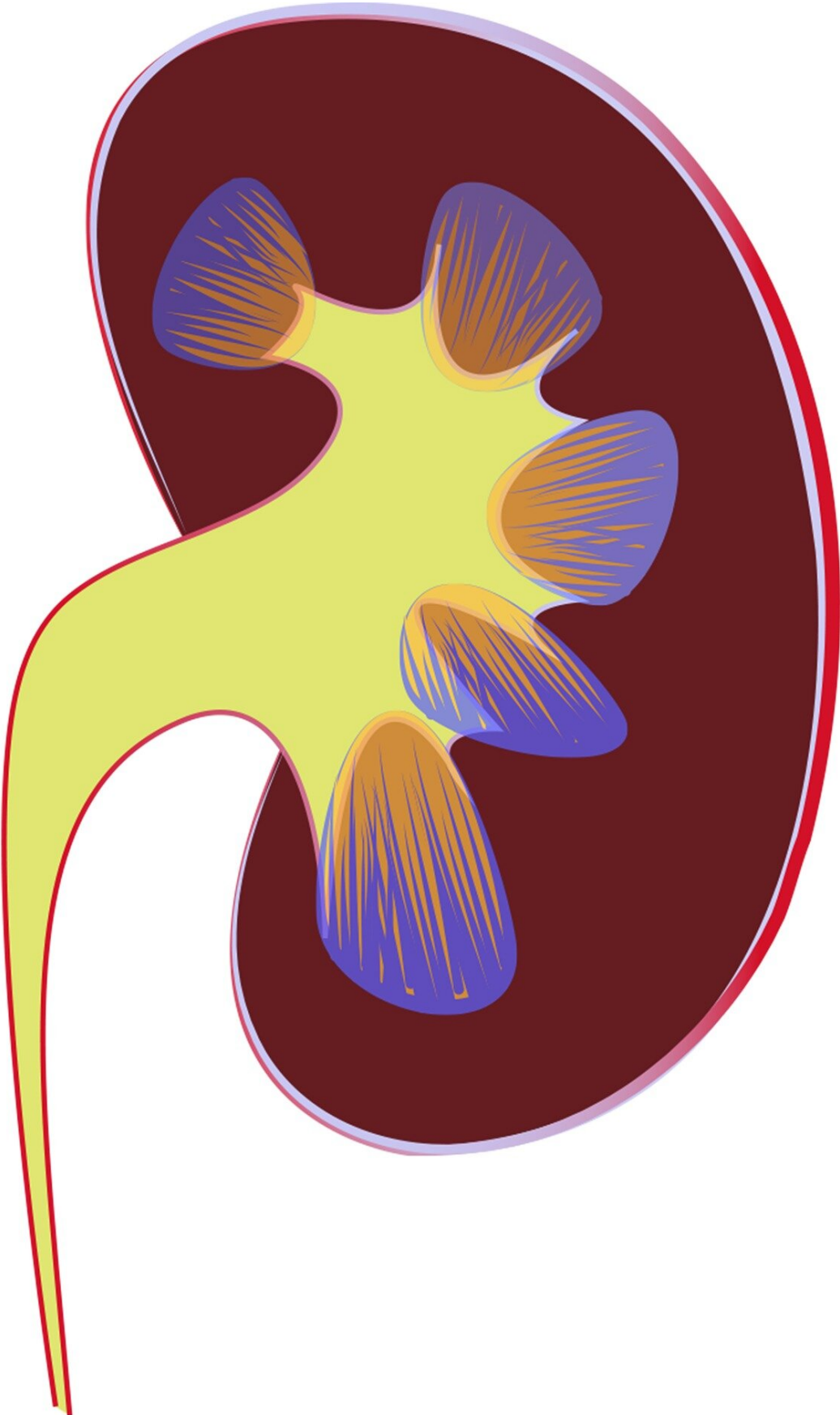


Dapagliflozin found effective and safe in adults with advanced kidney disease

July 17 2021



Credit: CC0 Public Domain

Studies have shown that diabetes drugs called sodium-glucose co-transporter 2 (SGLT2) inhibitors can provide kidney- and cardiovascular-related benefits to individuals with or without diabetes and with or without impaired kidney function. An analysis appearing in an upcoming issue of JASN now provides insights about the efficacy and safety of SGLT2 inhibitors in people with advanced chronic kidney disease (CKD), an especially vulnerable population.

For the analysis, Glenn M. Chertow, MD, MPH (Stanford University School of Medicine) and his colleagues examined data from the Dapagliflozin And Prevention of Adverse Outcomes in Chronic Kidney Disease (DAPA-CKD) trial, which enrolled patients with and without type 2 diabetes and with mildly decreased to severely decreased kidney function (stage 4 CKD).

In DAPA-CKD, 624 of 4,304 (14%) patients had stage 4 CKD—with an estimated [glomerular filtration rate](#) (eGFR), a measure of kidney function, as low as 25 mL/min/1.73 m²—at the start of the study. Patients were randomized to receive daily treatments of the SGLT2 inhibitor dapagliflozin or placebo. Among patients with stage 4 CKD, those randomized to dapagliflozin experienced a 27% reduction in the primary endpoint (a composite of a sustained and large decline in [kidney function](#), kidney failure, or death) and 29%, 17%, and 32% reductions in the kidney, cardiovascular, and mortality endpoints, respectively, compared with those randomized to placebo. Rates of serious side effects were similar in the two groups.

"This analysis shows that the effects of dapagliflozin in patients with stage 4 CKD are similar to effects in patients with mild to moderate CKD," said Dr. Chertow. "While patients with screening eGFR as low as 25 mL/min/1.73 m² were enrolled, it is noteworthy that neither dapagliflozin nor placebo were discontinued when eGFR declined, even to below 15 mL/min/1.73 m². Therefore, a drug initially developed for the treatment of diabetes can benefit patients with CKD with and without diabetes, including patients with moderate to advanced CKD."

More information: Glenn Chertow et al, Effects of Dapagliflozin in Stage 4 Chronic Kidney Disease, *Journal of the American Society of Nephrology* (2021). [DOI: 10.1681/ASN.2021020167](https://doi.org/10.1681/ASN.2021020167)

Provided by American Society of Nephrology

Citation: Dapagliflozin found effective and safe in adults with advanced kidney disease (2021, July 17) retrieved 22 December 2022 from <https://medicalxpress.com/news/2021-07-dapagliflozin-effective-safe-adults-advanced.html>

<p>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.</p>
--