

# CV risk lower with metformin in T2DM and reduced kidney function

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(HealthDay)—Treatment with metformin versus sulfonylureas is

associated with a reduced risk for major adverse cardiovascular events (MACE) among patients with type 2 diabetes and reduced kidney function, according to a study published online Sept. 19 in the *Journal of the American Medical Association* to coincide with the annual meeting of the European Association for the Study of Diabetes, held from Sept. 16 to 20 in Barcelona, Spain.

Christianne L. Roumie, M.D., M.P.H., from the Veteran Administration Tennessee Valley VA Health Care System Geriatric Research Education Clinical Center in Nashville, Tennessee, and colleagues conducted a retrospective cohort study of U.S. veterans to compare MACE among patients with diabetes and reduced [kidney function](#). The weighted cohort included 24,679 [metformin](#) users and 24,799 sulfonylurea users with a median estimated [glomerular filtration rate](#) of 55.8 mL/min/1.73 m<sup>2</sup> and hemoglobin A1c of 6.6 percent.

The researchers identified 1,048 MACE outcomes among metformin users and 1,394 events among sulfonylurea users (23.0 and 29.2 per 1,000 person-years, respectively) during follow-up (1.0 and 1.2 years, respectively). For metformin versus a sulfonylurea, the cause-specific adjusted hazard ratio for MACE was 0.80, yielding an adjusted rate difference of 5.8 fewer events per 1,000 person-years for metformin versus sulfonylurea use.

"This study and the results add to the limited observational evidence for the beneficial association of metformin compared with sulfonylurea and cardiovascular outcomes among those who develop reduced kidney function," the authors write.

One author disclosed financial ties to the pharmaceutical industry.

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