

# Two variants ID cardiovascular effect of intensive glyceimic Tx

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(HealthDay)—Two genetic variants predict the cardiovascular effect of

intensive glycemic control in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial, according to research published online Aug. 15 in *Diabetes Care*.

Hetal S. Shah, M.B.B.S., M.P.H., from the Joslin Diabetes Center in Boston, and colleagues analyzed 6.8 million common variants for genome-wide association with [cardiovascular mortality](#) among 2,667 white subjects from the ACCORD intensive [treatment](#) arm. In the entire ACCORD white [genetic](#) dataset (5,360 participants), significant loci were examined for their modulation of cardiovascular responses to glycemic treatment assignment.

The researchers identified two loci that attained genome-wide significance as determinants of cardiovascular mortality in the ACCORD intensive arm (10q26 and 5q13). In the entire ACCORD white genetic dataset, a genetic risk score (GRS) defined by the two variants was a significant modulator of cardiovascular mortality response to treatment assignment. Participants with a GRS of 0 had a reduction in cardiovascular mortality in response to intensive treatment (hazard ratio, 0.24; 95 percent confidence interval, 0.07 to 0.86); those with a GRS of 1 had no difference (hazard ratio, 0.92; 95 percent confidence interval, 0.54 to 1.56); and those with a GRS  $\geq 2$  had an increase (hazard ratio, 3.08; 95 percent confidence interval, 1.82 to 5.21).

"Further studies are warranted to determine whether these findings can be translated into new strategies to prevent cardiovascular complications of [diabetes](#)," the authors write.

Several pharmaceutical companies provided study medications, equipment, or supplies.

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

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