

Antihypertensive ACEIs associated with reduced cardiovascular events, death

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The blood pressure medication angiotensin-converting enzyme inhibitors (ACEIs) appear to reduce major cardiovascular events and death, as well death from all other causes, in patients with diabetes, while angiotensin II receptor blockers (ARBs) appear to have no such effect on those outcomes.

Approximately 285 million adults worldwide have diabetes, and diabetes is a risk factor for cardiovascular diseases (CV). The American Diabetes Association recommends that patients with diabetes and high [blood pressure](#) be treated with an ACEI or an ARB.

The authors examined the available medical literature to conduct a meta-analysis that examined the effects of ACEIs and ARBs on major CV events and death, as well as death from all other causes. The authors identified 35 clinical trials: 23 compared ACEIs with placebo or other active drugs (n=32,827 patients) and 13 other trials compared ARBs with no therapy (controls) (n=23,867 patients).

An analysis of the [clinical trials](#) suggests that ACEIs reduce the risk of death from all causes by 13 percent, cut the risk CV deaths by 17 percent and lower the risk of major CV events by 14 percent, including myocardial infarction (heart attack) by 21 percent and heart failure by 19 percent. ARBS did not affect all-cause mortality, CV death rate and major CV events, with the exception of [heart failure](#). ACEIs and ARBs were not associated with a decreased risk for stroke in patients with diabetes.

"Our meta-analysis shows that ACEIs reduce all-cause mortality, CV mortality and major CV events in patients with DM [diabetes mellitus], whereas ARBs have no beneficial effects on these outcomes. Thus, ACEIs should be considered as first-line therapy to limit the excess mortality and morbidity in this population," Jun Cheng, M.D., of the Medical School of Zhejiang University, China, and colleagues wrote in their *JAMA Internal Medicine* paper.

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