

## ACE inhibitors prevent diabetic kidney disease

<b>Clinical question</b>	Do antihypertensive agents prevent diabetic kidney disease?
<b>Bottom line</b>	Angiotensin-converting enzyme inhibitors (ACE inhibitors) reduced the risk of new onset kidney disease by 29% and the risk of death by 16% in people with diabetes. Clear renal benefits were observed among individuals without hypertension at baseline, and in comparison with calcium channel blockers. These effects were consistent across a broad spectrum of people with diabetes, including individuals with type 1 or type 2 diabetes, with or without hypertension, and in placebo-controlled studies or those comparing ACE inhibitors with other blood pressure agents. Other studies have suggested ACE inhibitors also prevented new onset diabetic retinopathy in patients without albuminuria. In contrast, it was not possible to demonstrate similar overall benefits for angiotensin receptor blockers (ARB), although it remains possible benefits may be present for high-risk individuals.
<b>Caveat</b>	<p>The main limitation of this study was that the effects of blood pressure lowering agents on end-stage kidney disease could not be ascertained, possibly due to the slowly progressive nature of diabetic kidney disease, and the resultant low incidence of end-stage kidney disease in the population.</p> <p>The risk of cough was significantly increased with ACE inhibitors when compared with placebo.</p>
<b>Context</b>	Many people with diabetes (around 20% to 60%) are affected by hypertension and need drugs to treat this condition. Many people with diabetic kidney disease (20% to 40%) go on to develop end-stage kidney disease, and many others die from heart disease or other circulatory problems before end-stage kidney disease develops
<b>Cochrane Systematic Review</b>	Lv J et al. Antihypertensive agents for preventing diabetic kidney disease. Cochrane Reviews, 2012, Issue 12. Art. No.: CD004136.DOI: 10.1002/14651858.

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Practical Evidence About Real Life Situations

CD004136.pub3. This review contains 26 studies involving 61,264 participants.
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[References]

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