

How do Calcium channel blockers compare to other drugs for the treatment of hypertension?

Clinical Question	How do calcium channel blockers (CCB) compare to other classes of antihypertensive drugs in reducing the incidence of major adverse cardiovascular events?
Bottom Line	<p>First-line calcium channel blockers (CCBs) do not affect total mortality as compared to other antihypertensive drug classes. First-line CCBs reduce major cardiovascular events, stroke, and cardiovascular mortality as compared to beta-blockers. First-line CCBs increase major cardiovascular and congestive heart failure events as compared to diuretics. First-line CCBs reduce stroke as compared to angiotensin-converting enzyme (ACE) inhibitors and myocardial infarction as compared to angiotensin receptor blockers (ARBs), but they increase congestive heart failure events as compared to both ACE inhibitors and ARBs.</p> <p>The review shows an advantage of diuretics over CCBs in reducing major cardiovascular mortality and congestive heart failure events. We found evidence supporting CCBs over beta-blockers in reduce major cardiovascular events, stroke, and cardiovascular mortality.</p>
Caveat	It should be noted that many of the differences found in the current review are not robust, and further trials might change the conclusions. It will therefore be important to follow the research in this field closely and update this review when new data become available.
Context	This is the first update of a review published in 2010. While calcium channel blockers (CCBs) are often recommended as a first-line drug to treat hypertension, the effect of CCBs on the prevention of cardiovascular events, as compared with other antihypertensive drug classes, is still debated.
Cochrane Systematic Review	Zhu J, Chen N, Zhou M, Guo J, Zhu C, Zhou J, Ma M, He L. Calcium channel blockers versus other classes of drugs for hypertension. Cochrane Database of Systematic Reviews 2022, Issue 1. Art. No.: CD003654. DOI: 10.1002/14651858.CD003654.pub6. This review contains 23 trials with a total of 153,849 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003654.pub6/full>