

Angiotensin II Receptor Blockers (ARBs)

Angiotensin II receptor blockers (ARBs) are a group of drugs similar to ACE inhibitors in that they both decrease the influence of angiotensin II. Unlike ACE inhibitors, these medications do not cause cough and may have a lower incidence of developing angioedema. They are indicated for use in hypertension, but may also be prescribed for those with heart failure, diabetic nephropathy, myocardial infarction, and for stroke prevention.



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Ends in "-sartan"

Spartans

ARBs end in the suffix "-sartan" and include drugs such as losartan.

Mechanism of Action

Blocks Angiotensin II Receptor

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These drugs block the actions of angiotensin II receptors, without affecting bradykinin levels. This results in vasodilation and reduction of vasopressin and aldosterone secretion.

Indications

Hypertension

Hiker-BP

All ARBs are approved for treating hypertension, especially when patients are not tolerant of ACE inhibitor therapy. They block angiotensin II receptors, leading to vasopressin and aldosterone reduction thereby reducing blood pressure. Additionally, they have also been improved for use in heart failure, diabetic nephropathy, myocardial infarction, and stroke prevention.

Side Effects

Angioedema

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Angioedema is a rare reaction and is characterised by rapid swelling of the tongue, glottis, and pharynx. If angioedema occurs from the use of ARBs, their use should be stopped immediately. Severe reactions may be treated with subcutaneous epinephrine.

Contraindications

Renal Artery Stenosis

Kidney Arteries of Stone

ARBs can cause renal failure in patients with renal artery stenosis. Therefore, their use is contraindicated in these patients.

Pregnancy

Pregnant

ARBs are not major human teratogens, but are generally avoided in all trimesters of pregnancy due to the risk of adverse effects. While more recent research has concluded that the use of ARBS is generally unsafe in only the 2nd and 3rd trimesters other research has shown complications in the 1st trimester. It is generally recommended to avoid ARBs in pregnant patients since there are many other safe alternatives.