

Angiotensin Receptor Blockers (ARBs)

Angiotensin II receptor blockers are similar in effect to ACE inhibitors, but do not result in increased level of bradykinin, and are not as likely to cause persistent dry cough as a side effect. They are typically indicated in patients who are intolerant of ACE inhibitor therapy. They can be recalled by having the suffix "sartan." This drug class treats hypertension, CHF and can be helpful in slowing progression of diabetic nephropathy. ARBs work by blocking angiotensin II receptors. Though these drugs do not cause angioedema or cough, they can lead to the side effect of hyperkalemia due to interference with the renin-angiotensin-aldosterone system.



PLAY PICMONIC

-sartan suffix

[Spartan](#)

Angiotensin receptor blockers have a "sartan" suffix and include drugs such as losartan.

Indications

Hypertension

[Hiker-BP](#)

These drugs are effective hypertension treatments, especially when patients are not tolerant of ACE inhibitor therapy. They block angiotensin II AT1 receptors, leading to vasopressin and aldosterone reduction, reducing blood pressure.

CHF

[CHF Heart-balloon](#)

These drugs may be used to treat CHF in patients intolerant to therapy with ACE inhibitors, particularly candesartan.

Diabetic Nephropathy

[Dyed-beads Kidney](#)

These drugs have used to treat kidney damage from diabetes type II and may delay the progression of disease.

Mechanism of Action

Angiotensin II Receptor Blockers

[Angel-tennis in \(2\) Tutu Receptor Blocked](#)

These drugs block the activation of angiotensin II AT1 receptors, without affecting bradykinin levels. This results in vasodilation, and reduction of vasopressin secretion and reduction of aldosterone production and secretion.

Side Effect

Hyperkalemia

Hiker-banana

Hyperkalemia is a rare adverse effect of angiotensin receptor blockers, as it may interfere with normal urinary excretion. Patients with high potassium levels should be cautioned with this medication.

Contraindication

Pregnancy

Caution-tape Pregnant-woman

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.