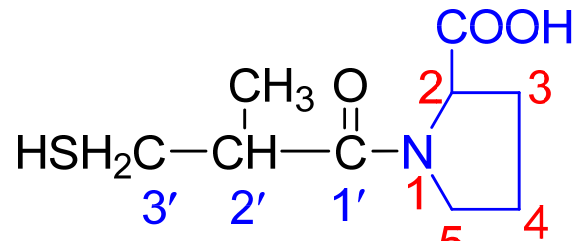


## Angiotensin converting enzyme (ACE) inhibitors:

### Captopril



IUPAC: (2S)-1-[(2S)-2'-methyl-3'-sulfanylpropanoyl]pyrrolidine-2-carboxylic acid

#### MOA

- ❖ Angiotensin II constricts coronary blood vessels and is positively inotropic, which under normal circumstances, would increase vascular resistance and oxygen consumption.
- ❖ ACE Inhibitors blocks the conversion of angiotensin-I to the potent vasoconstrictor angiotensin-II. ACE inhibitors also decrease secretion of aldosterone, resulting in decreased sodium & water retention.
- ❖ inhibition of ACE also increases the level of bradikinin which in turn stimulate synthesis of vasodilators prostaglandins.
- ❖ This contributes to vasodilation & decreased peripheral resistance.

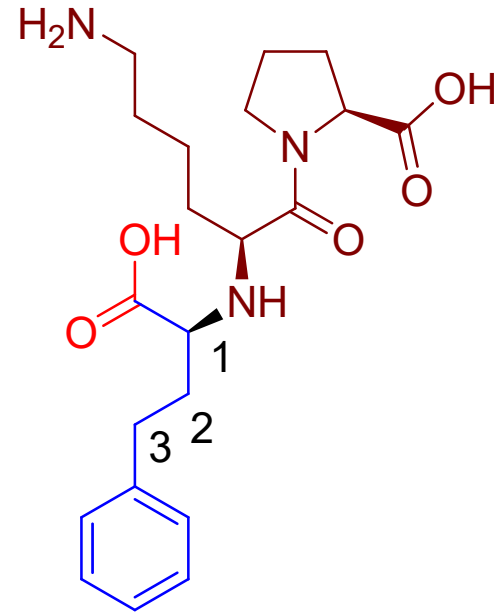
**Uses:** Indicated for the treatment of hypertension and as an adjunct therapy in the treatment of heart failure.

## Lisinopril

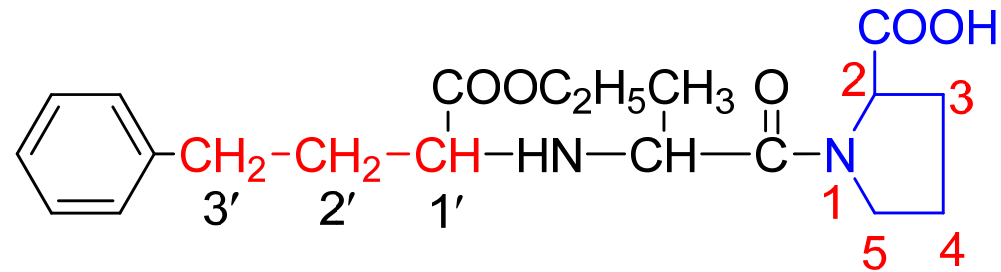
IUPAC: (S)-1-(N(2)-(1-Carboxy-3-phenylpropyl)-L-lysyl)-L-proline

MOA: Similar to captopril

Uses: Indicated for the treatment of hypertension and as an adjunct therapy in the treatment of heart failure.



# Enalapril

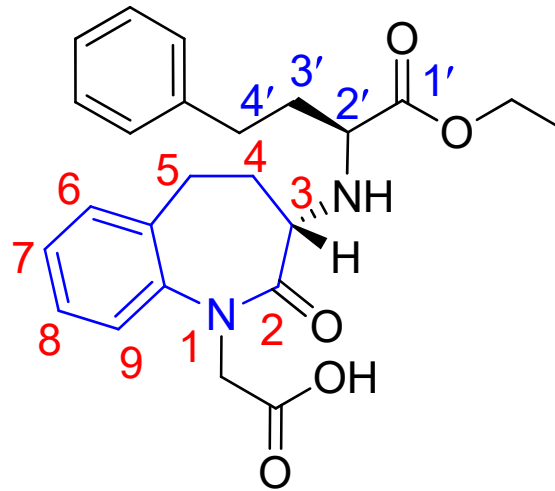


IUPAC: (S)-1-(N-(1-(ethoxycarbonyl)-3-phenylpropyl)-L-alanyl)-L-proline

MOA: Similar to captopril

Uses: Indicated for the treatment of hypertension and as an adjunct therapy in the treatment of heart failure.

## Benazepril hydrochloride

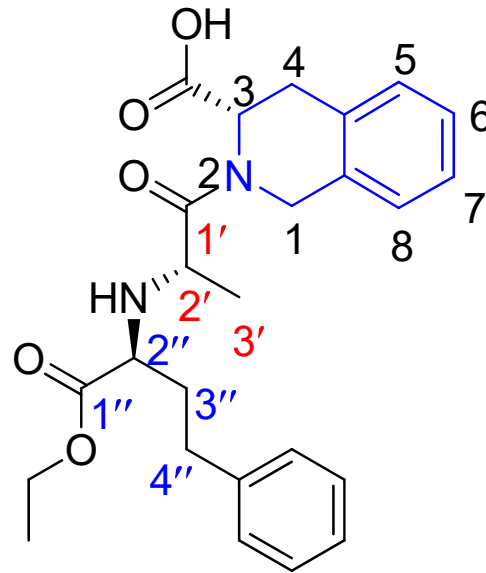


IUPAC: 2-[(3S)-3-{[(2'S)-1'-ethoxy-1'-oxo-4'-phenylbutan-2'-yl]amino}-2-oxo-2,3,4,5-tetrahydro-1H-1-benzazepin-1-yl]acetic acid

MOA: Similar to captopril

Uses: Indicated for the treatment of hypertension and as an adjunct therapy in the treatment of heart failure.

## Quinapril hydrochloride



IUPAC: (3S)-2-[(2S)-2'-{[(2''S)-1''-ethoxy-1''-oxo-4''-phenylbutan-2''-yl]amino}propanoyl]-1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid

MOA: Similar to captopril

Uses: Indicated for the treatment of hypertension and as an adjunct therapy in the treatment of heart failure.