

DRUGS USED IN HEART FAILURE

Drug	Mechanism of Action
Diuretics	
<i>Loop Diuretics</i>	<ul style="list-style-type: none">Decrease fluid volumeDecrease preloadDecrease pulmonary venous pressure
<ul style="list-style-type: none">furosemide (Lasix)bumetanide (Bumex)	
<i>Thiazide Diuretics</i>	<ul style="list-style-type: none">Relieve symptoms of heart failure (e.g., edema)
<ul style="list-style-type: none">hydrochlorothiazide (HCTZ)metolazone (Zaroxolyn)	
<i>Potassium-Sparing Diuretics</i>	
<ul style="list-style-type: none">spironolactone (Aldactone)eplerenone (Inspra)	

ACE Inhibitors

- captopril (Capoten)
- benazepril (Lotensin)
- enalapril (Vasotec)
- Dilate venules and arterioles
- Improve renal blood flow
- Decrease fluid volume
- Relieve symptoms of heart failure

Angiotensin II Receptor Blockers

- losartan (Cozaar)
- valsartan (Diovan)
- Promote reverse remodeling
- Decrease morbidity and mortality

Vasodilators

- hydralazine (Apresoline)
- isosorbide dinitrate/hydralazine (BiDil)
- nitrates (e.g., nitroglycerin [Nitro-Bid], isosorbide dinitrate [Isordil])
- Reduce cardiac afterload, leading to increased CO
- Dilate the arterioles of the kidneys, leading to increased renal perfusion and fluid loss
- Decrease BP
- Decrease preload
- Relieve symptoms of heart failure (e.g., dyspnea)

β-Adrenergic Blockers

- metoprolol (Toprol XL)
- bisoprolol (Zebeta)
- carvedilol (Coreg)
- Promote reverse remodeling
- Decrease afterload
- Inhibit SNS
- Decrease morbidity and mortality

Positive Inotropes

β-Adrenergic Agonists

- dopamine (Intropin)
- dobutamine (Dobutrex)

- Increase contractility (positive inotropic effect)
- Increase CO

Phosphodiesterase Inhibitor

- milrinone (Primacor)

- Increase heart rate (positive chronotropic effect)
- Produce mild vasodilation

Digitalis Glycoside

- digoxin (Lanoxin)

- Increase stroke volume and CO
- Promote vasodilation

Morphine

- Decreases anxiety
- Decreases preload and afterload

Antidysrhythmic Drugs

- Prevent or treat dysrhythmias

Anticoagulants

- Prevent thromboembolism
- Recommended for patients with an ejection fraction <20% and/or atrial fibrillation

ACE, Angiotensin-converting enzyme; ADHF, acute decompensated heart failure; CO, cardiac output; SNS, sympathetic nervous system.