

Patient Information Leaflet
Medications for Heart Failure

What is Heart Failure?

It is a condition which results in the heart being less efficient at pumping blood around the body. As a result, some parts of your body may not get enough blood and oxygen, and it may lead to symptoms such as shortness of breath and tiredness (refer to the list of symptoms below). Heart Failure is a chronic problem but it can be managed to make you feel better.

What are the symptoms of Heart Failure?

- Shortness of breath especially on exertion
- Waking up feeling breathless at night
- Weakness / tiredness
- Swollen feet, ankles, legs and abdomen
- Weight gain
- Frequent coughing, and experiencing a dry, hacking cough when lying flat in bed

What causes Heart Failure?

There are many different causes of heart failure. These include:

- Heart attack and coronary heart disease
- High blood pressure, especially uncontrolled high blood pressure
- Narrow or leaking heart valves
- Infection of the heart muscle
- Excessive alcohol intake
- Abnormalities of the heart rhythm

Why do I need to take medications?

Medications work together with lifestyle changes such as fluid restriction, dietary changes, regular exercise, sufficient rest and smoking cessation to prevent heart failure from becoming worse. Compliance to these medications and taking them properly can lead to the following benefits, which include:

- Living a longer and normal life
- Treating heart failure symptoms
- Preventing and be less at risk for hospital admissions
- Maintaining/improving heart function and preventing further deterioration
- Ability to breathe better
- Feeling less tired
- Increased activity level

What are the common medications used for Heart Failure?

**1) Angiotensin Converting Enzyme Inhibitors (ACEI) OR
Angiotensin II Receptor Blocker (ARB) OR
Angiotensin II Receptor Blocker/Nepriylsin Inhibitor (ARNI)**

Patients with Heart Failure can be prescribed one drug from these 3 large drug classes to improve and maintain heart function, lower blood pressure and prevent the narrowing of the blood vessels. These drugs may take a few months to exert the full effect. Your prescriber may adjust the doses gradually until a target or maximum dose is reached to maximise your quality of life and improve survival.

Drug Class	Members of Class	Possible Side Effects	Precautions and Advice
ACEI	<ul style="list-style-type: none"> • Captopril • Enalapril • Lisinopril • Perindopril • Ramipril 	<ul style="list-style-type: none"> • Dizziness • Tiredness • Dry cough (usually ACEI) • May affect kidney function • Hypotension (especially Sacubitril/Valsartan) 	<ul style="list-style-type: none"> • Slowly get up from a sitting or lying position to minimise dizziness. • Inform your doctor or pharmacist if you have a persistent and intolerable dry cough. • Consult the emergency medicine department immediately if there is any swelling of lips, tongue or face (rare). • Check your kidney function with regular blood tests. • Do not take additional potassium supplements other than those prescribed by your doctor and avoid using salt substitutes.
ARB	<ul style="list-style-type: none"> • Candesartan • Losartan • Valsartan 		
ARNI	<ul style="list-style-type: none"> • Sacubitril / Valsartan 		

2) Beta Blocker

Patients with heart failure can be prescribed one drug from this drug class to improve and maintain heart function by reducing the workload and oxygen demands of the heart. The drug can also help to reduce your blood pressure and heart rate. Your prescriber may adjust the doses gradually until a target or maximum dose is reached to maximise your quality of life and improve survival.

Members of Class	Possible Side Effects	Precautions and Advice
<ul style="list-style-type: none"> • Bisoprolol • Carvedilol • Metoprolol XL • Nebivolol 	<ul style="list-style-type: none"> • Tiredness • Slow heartbeat • Dizziness • Cold hands and feet • Shortness of breath/ wheezing 	<ul style="list-style-type: none"> • Slowly get up from a sitting or lying position to minimise dizziness. • Do not suddenly discontinue the drug. • Inform your doctor or pharmacist if you have worsening signs of heart failure (such as experiencing breathlessness or weight increase) after starting or increasing the dose of this medicine.

3) Aldosterone Antagonists

Patients with heart failure can be prescribed one drug from this drug class to suppress the hormone (aldosterone) that affects the heart, thereby improving and maintaining heart function. It can also help the kidneys to remove excess fluid while retaining potassium. Overall, it helps to improve survival.

Members of Class	Possible Side Effects	Precautions and Advice
<ul style="list-style-type: none"> • Spironolactone • Eplerenone 	<ul style="list-style-type: none"> • Breast tenderness or enlargement with spironolactone (especially in males) • May affect kidney function • May cause high potassium level • Dizziness 	<ul style="list-style-type: none"> • Slowly get up from a sitting or lying position to minimise dizziness. • Inform your doctor or pharmacist if the side effects (such as severe dizziness or breast swelling/pain) occur. • Avoid potassium supplements, food containing high level of potassium, and certain salt substitutes as instructed. • Check your kidney function with regular blood tests.

4) Diuretics (“Water pills”)

These drugs may be used to remove excess water in the body by increasing sodium and urine output, thus relieving symptoms of fluid overload.

Members of Class	Possible Side Effects	Precautions and Advice
<ul style="list-style-type: none"> • Furosemide • Bumetanide • Metolazone • Hydrochlorothiazide 	<ul style="list-style-type: none"> • Nausea • Dizziness • Loss of potassium which may cause leg cramps and muscle weakness 	<ul style="list-style-type: none"> • Frequent urination is the desired effect. • Take your diuretics in the morning or late afternoon (if it is meant to be taken twice or thrice daily) to avoid having to wake up often in the night to pass urine. • Your healthcare provider may prescribe potassium supplements to help replace the lost potassium.

5) I_f channel inhibitor

It is used to slow down heart rate, allowing the heart to pump more effectively.

Member of Class	Possible Side Effects	Precaution and Advice
Ivabradine	<ul style="list-style-type: none"> • Headache • Sensation of enhanced brightness • Blurred vision 	<ul style="list-style-type: none"> • Inform your doctor or pharmacist if any changes in vision occur.

Compliance to Heart Failure medications

Use this checklist to help you ensure that you are taking your medications regularly and safely:

- Take the medications exactly as prescribed at each visit. Be mindful of any medication dose change at each visit. Follow the directions on the medicine label carefully.
- Keep a list of all the medications you take (including prescription and over-the-counter drugs, vitamins, supplements, and herbal remedies). Bring the most updated list with you to all your medical appointments. You should also show the list to your pharmacist when purchasing over-the-counter remedies as some remedies can interfere with your prescription medications.
- Refill your medications in advance before they run out.
- Use a pill box to help you remember to take your medications and to take them at the right time.
- Inform your healthcare provider if you have any side effects from the medications.
- Do not stop taking any medications on your own. Talk to your healthcare provider first.
- Ask your healthcare provider or pharmacist if you have any questions about your medications.

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Information is correct at time of printing (Dec 2017) and subject to revision without prior notice.