

Patient information guide to
HEART MEDICATIONS





Croí works to improve the quality of life for all, through the prevention and control of heart disease, stroke, diabetes and obesity.

Croí is a not-for-profit foundation dedicated to fighting heart disease and stroke in the region. We are an independent organisation, totally funded through our own fundraising activities, voluntary contributions and philanthropic support.

We are at the heart of the community working with people to make sustainable and life-changing improvements to their cardiovascular health and wellbeing; supporting patients and their families; teaching the lifesaving skills of CPR and providing health care professionals with the knowledge and skills to translate best practice evidence into daily preventive care.

If you would like to support Croí in the important work we do, please contact us by:

- Telephone: **091 544310**
- Email: **info@croi.ie**
- Visit: **www.croi.ie**
- Address: **Croí Heart & Stroke Centre, Moyola Lane, Newcastle, Galway, H91 FF68**

Acknowledgements:

This book has been prepared by Croí in association with the Cardiology and Cardiothoracic Departments at Galway University Hospital. All Rights Reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic or otherwise, without prior permission. © Croí 2017

Contents

Introduction	2
Why are there so many different medicines	4
What the medicines do	6
How and when are the medicines taken	7
Side effects	8
Types of Medicine	9
Ace Inhibitors	10
Angiotensin II Antagonists	11
Anti Arrhythmic	12
Anticoagulant	13
Antiplatelet	15
Beta Blockers	16
Calcium Channel Blockers	17
Cholesterol Lowering Medications	18
Digitalis Preparations	19
Diuretics (also known as water pills)	20
Vasodilators/Nitrates	21
Medication Checklist	23
Medications Table	24

Introduction

You have been diagnosed with a heart condition that requires you to take medication.

You have been prescribed this medicine as part of your long term treatment and it will play an important role in keeping you healthy and helping your heart to work effectively.

There are many types and combinations of medication and your doctor will decide the best treatment combination for your condition.

This booklet describes some of the different medicines prescribed for people with heart conditions such as; angina, heart attack, heart failure, heart rhythm disorder and heart valve disease. It also outlines medicines used to control high blood pressure, lower cholesterol levels and to prevent blood clots forming.

It is important for you to have an understanding of the medicines you are taking and know:

- ✓ **The reason why you have been prescribed them**
- ✓ **What the medicine does**
- ✓ **Possible side effects**

Some of the main types of commonly prescribed cardiovascular medications are summarised in this booklet.

If the medicine you have been prescribed is not listed here, remember that your healthcare provider and pharmacist are your best sources of information.

It is important to discuss all of the drugs you take with your doctor and understand their desired effects and possible side effects.

You should never stop taking a medicine and never change your dose or frequency without first consulting your doctor.

The information contained in this booklet is meant as a guide. It does not replace the information provided with each medicine or the advice from your GP or Pharmacist.

Note

For your information and reference, we have included generic names as well as major trade names to help you identify what you may be taking; however, we are not recommending or endorsing any specific products.

Why are there so many medicines?

Scientific research has led to the development of lots of different medicines that can be used to treat diseases of the heart and circulation.

They all belong to a few main groups. Medicines within each group are similar, but may have minor variations.

As an example, medicines for lowering blood pressure may act in different ways. Some will act on the walls of the arteries (the blood vessels that take blood from the heart to other parts of the body), some act on the kidneys and some act on the part of the brain that helps control blood pressure.

A single medicine may have several different names. Each one has an official name known as the “generic” or “non-proprietary” name. It may also be prescribed under one or more brand names or its “proprietary name”.

Medicines are commonly used to treat the following heart conditions and heart-related conditions.

- **Angina** – pain or discomfort in the chest, or shortness of breath, caused by narrowing of the coronary arteries (the arteries that supply blood to the heart). Angina is most commonly caused by coronary heart disease, which is when there is a build-up of fatty material (atheroma) in the walls of the arteries
- **Heart attack** – when there is a blockage in the coronary artery. This is usually caused by a blood clot that forms when fatty material breaks away or ruptures
- **High blood pressure** - also called hypertension
- **Heart failure** – when the main “pumping” action of the heart is not working as well as it should be
- **Arrhythmia** – a heart rhythm that may be too slow, too fast or irregular
- **Heart valve disease** – when one or more of the four valves in the heart is diseased or damaged
- **High blood cholesterol level** – also called hypercholesterolemia. If left untreated, this causes fatty deposits to form on the blood vessel walls, increasing the risk of having a heart attack

What the medicines do

Several different medicines may be available to treat your heart condition.

Most medicines used to treat heart conditions change how the heart or the blood circulation works.

People are all different and it can be difficult to know exactly which medicines may suit you.

Your doctor will choose the one most likely to be safe and effective for your condition.

With the right medicines taken at the right doses, it is often possible to reduce the symptoms of heart-related conditions and to help the heart work better than before.

Grapefruit

Grapefruit and grapefruit juice can affect the way a number of heart medications work. They can increase the effect of the medicine which can make you feel unwell. If you are concerned about whether it is safe for you to take grapefruit or grapefruit juice, ask your doctor or pharmacist.

Salt

Some medicines contain sodium which is found in salt. A large amount of salt in your diet increases the risk of high blood pressure and therefore cardiovascular disease. To find out if your medicines contain sodium, check the information sheet that comes with them. If you are worried, talk to your doctor or pharmacist.

How and when are the medicines taken?

Medicines can be given in a number of different ways.

- **Orally** – Most medicines for the heart are taken by the mouth, usually as tablets, capsules or liquids which you either swallow or take dissolved in water.
- **Sublingually** – When a tablet is placed under the tongue and allowed to dissolve, or when you spray the medicines directly under your tongue.
- **Self-adhesive patch** – When a patch containing the medicine is placed on the skin and the medicine is absorbed over a period of time.

Your doctor will decide how often you will need to take your medicine as it depends on what it is and what condition it is being used to treat.

Most medicines need to be taken regularly, as prescribed by your doctor.

Some medicines need to be taken only when you get a particular symptom, such as angina.

Side effects

Your doctor will prescribe medicines for you to help improve your conditions or your symptoms. It is important to realise that your medicines are prescribed for your benefit and like most people you will probably not experience any side effects at all. If you do, they can sometimes disappear after a while.

For more information about possible side effects of the medicines that you are taking, read the information leaflet that comes with the medicine. If you are worried about the side effects speak to your doctor or pharmacist.

What to do if you have side effects

If you develop any new, persistent or troublesome symptoms, or problems after starting a medicine, it is important to tell your doctor about this immediately.

Your doctor may decide to change your dosage or prescribe a different medicine instead.

It is important not to stop taking your prescribed medicines without medical advice as this could make your condition worse.

Types of Medicine

Ace Inhibitors	10
Angiotensin II Antagonists	11
Anti Arrhythmic	12
Anticoagulant	13
Antiplatelet	15
Beta Blockers	14
Calcium Channel Blockers	17
Cholesterol Lowering Medications	18
Digitalis Preparations/ Digoxin/Digitoxin	19
Diuretics (also known as water pills)	20
Vasodilators/Nitrates	21

Ace Inhibitors

Commonly prescribed include:

- Captopril (Capoten)
- Enalapril (Innovace)
- Lisinopril (Zestril)
- Perindopril (Coversyl)
- Ramipril (Tritace/Ramilo/Ramic)

What the Medication Does

- Reduces the workload on the heart, making it easier for it to pump
- Lowers blood pressure
- Relaxes arteries

Reason for Medication

Used to treat or improve symptoms of cardiovascular conditions including high blood pressure and heart failure.

Possible Side Effects

- Dizziness when standing up
- Persistent dry cough
- Change in taste
- Reduced kidney function

Angiotensin II Antagonists

(Also known as Angiotensin-2 Receptor Antagonists or ARBs)

Commonly prescribed include:

- Candesartan (Atacand)
- Irbesartan (Approvel)
- Losartan (Cozaar)
- Valsartan (Diovan)

What the Medication Does

- Lowers blood pressure
- Reduces workload on the heart
- Improves the heart's pumping action

Reason for Medication

Used to treat or improve symptoms of cardiovascular conditions including high blood pressure and heart failure.

Possible Side Effects

- Light-headedness

Anti Arrhythmic

Commonly prescribed include:

- Amiodarone (Cordarone X)
- Dronedrone

What the Medication Does

- Regulates an irregular heart rhythm

Reason for Medication

- To slow the heart rate so that it can return to a normal rhythm
- Used to keep the heart beating normally in patients with life threatening heart rhythm disorders

Possible Side Effects

- Light headedness
- Blurred vision
- Liver problems
- Dark urine
- Increased sensitivity to sunlight

Anticoagulant

Commonly prescribed include:

- Warfarin - refer to separate Warfarin information booklet

New Oral Anticoagulants

- Rivaroxaban (Xarelto)
- Dabigatran (Pradaxa)
- Apixaban (Eliquis)
- Edoxaban (Lixiana)

What the Medication Does

- Decreases the clotting (coagulating) ability of the blood

Reason for Medication

- Helps to prevent harmful clots from forming in the blood vessels
- May prevent the clots from becoming larger and causing more serious problems
- Often prescribed to prevent first or recurrent stroke

Possible Side Effects

- Bleeding that does not stop by itself
- Severe bruising
- Red or dark brown urine
- Red or black bowel movements
- For women, heavier bleeding during periods, or other vaginal bleeding that is not caused by periods

Anticoagulant Important Information

- If you miss a dose, take it as soon as you remember, but do not double up on the total daily dose
- If you sustain an injury while taking an anticoagulant, seek medical advice
- Tell your doctor or dentist well before any planned procedure that you are taking an anticoagulant
- Avoid activities and sports that may cause serious injuries
- If seeking medical attention for an emergency bleed, tell your doctor that you are taking an anticoagulant

Antiplatelet

Commonly prescribed include:

- Aspirin
- Clopidogrel (Plavix)
- Prasugrel (Effient)
- Ticagrelor (Brilique)

What the Medication Does

- Reduces clot formation.

Reason for Medication

Helps prevent clotting in patients who have had a heart attack; an ischemic stroke; a TIA (transient ischemic attack, or 'mini stroke'); have unstable angina or other forms of cardiovascular disease. Also, prevents clot formation within a stent.

Certain patients will be prescribed aspirin combined with another antiplatelet drug – also known as dual antiplatelet therapy (DAPT).

Possible Side Effects

- Irritation of the stomach (to prevent this, take medicine after a meal and never on an empty stomach)
- Wheeziness (asthmatic patients should take caution)
- Increased risk of bleeding (very rare)

Beta Blockers

Commonly prescribed include:

- Atenolol (Tenormin/Atecor)
- Bisoprolol (Emcor, Bisopine, Cardicor)
- Carvedilol (Eucardic)
- Metoprolol (Betaloc)
- Nebivolol (Nebilet)

What the Medication Does

Decreases the heart rate and cardiac output, which lowers blood pressure and makes the heart beat more slowly and with less force.

Reason for Medication

Slowing the heart rate, lowering the blood pressure and reducing the amount of work the heart has to do.

Possible Side Effects

- Tiredness
- Cold hands and feet
- Erectile dysfunction (impotence)
- Wheeziness
- Dizziness
- Disturbed sleep / nightmares

Calcium Channel Blockers

Also known as Calcium Antagonists or Calcium Blockers.

Commonly prescribed include:

- Amlodipine (Istin)
- Diltiazem (Tildem, Dilzem)
- Verapamil (Isoptin, Verap)

What the Medication Does

- Interrupts the movement of calcium into the cells of the heart and blood vessels
- May decrease the heart's pumping strength and relax blood vessels

Reason for Medication

Used to treat high blood pressure; chest pain (angina) caused by reduced blood supply to the heart muscle and some arrhythmias (abnormal heart rhythms).

Possible Side Effects

- Flushing
- Headaches
- Dizziness
- Ankle swelling
- Constipation
- Nausea

Cholesterol Lowering Medications

Common types of cholesterol-lowering drugs include:

- Statins: Atorvastatin (Lipitor), Rosuvastatin (Crestor), Simvastatin (Zocor)
- Nicotinic Acids: Lovastatin (Advicor)
- Cholesterol Absorption Inhibitors: Ezetimibe/Simvastatin (Vytorin)

What the Medication Does

- Slows down the cholesterol production process

Reason for Medication

Used to lower LDL (“bad”) cholesterol.

Possible Side Effects

- Tiredness
- Disturbed sleep
- Nausea
- Vomiting
- Diarrhoea
- Headache
- Muscle weakness

Digitalis Preparations/ Digoxin/Digitoxin

Commonly prescribed include:

- Lanoxin

What the Medication Does

- Slows, steadies and strengthens the heartbeat

Check your pulse every morning. It must be over 50 beats per minute before taking Digoxin. If you are unsure how to take your pulse, ask your doctor or nurse.

Reason for Medication

Used to relieve heart failure symptoms, especially when the patient isn't responding to ACE inhibitors and diuretics.

Slows certain types of irregular heartbeat (arrhythmias), particularly Atrial Fibrillation.

Possible Side Effects

- Loss of appetite
- Palpitations
- Fainting
- Nausea
- Vomiting
- An excess of digoxin can make everything look yellowish

Diuretics (Also known as Water Pills)

Commonly prescribed include:

- Bumetanide (Burinex)
- Bendroflumethiazide (Centyl)
- Co-amilofruse (Frumil)
- Furosemide (Lasix)
- Spironolactone (Aldactone)

What the Medication Does

- Helps to relieve the heart's workload
- Decreases the build-up of fluid in the lungs and other parts of the body, such as the ankles and legs
- Causes the body to rid itself of excess fluids and sodium through urination (avoid taking in the evening to prevent disturbed sleep)

Reason for Medication

- Used to help lower blood pressure
- Used to help reduce swelling (oedema) from excess build-up of fluid in the body

Possible Side Effects

- Strain on kidneys
- Lowers blood potassium levels
- Gout or can worsen symptoms of Gout
- Tiredness
- Erectile dysfunction (impotence)

Vasodilators (also known as Nitrates)

(Nitroglycerin tablets are a form of vasodilator)

Commonly prescribed include:

- Isosorbide dinitrate (Isordil)
- Nesiritide (Natreacor)
- Hydralazine (Apresoline)
- Nitrates
- Minoxidil
- Imdur

What the Medication Does

Relaxes blood vessels and increases the supply of blood and oxygen to the heart while reducing its workload.

This medication can come in the form of:

- Pills to be swallowed
- Tablets for use under the tongue
- A patch
- A GTN Spray

Reason for Medication

Used to ease chest pain (angina)

Possible Side Effects

- Headache
- Flushing
- Dizziness
- Feeling faint

How to use your GTN Spray

Angina symptoms include pain in the chest, arms, jaw and gums. You may not experience all of the symptoms together.

Learn to recognise these symptoms and use your GTN spray as follows to relieve the pain quickly:

- When symptoms start, stop what you are doing and rest
- Spray 2 puffs of your GTN spray under your tongue and close your mouth (1st dose)
- Wait for 5 minutes
- If the symptoms are still present spray 2 more puffs (2nd dose)
- Wait for 5 minutes
- If the symptoms are still present spray 2 more puffs (3rd dose)
- Wait for 5 minutes
- If the symptoms have persisted for 15 minutes you should seek medical advice immediately – dial 999 or 112.

Always have two sprays available, one at home and one for going out.

Always carry your GTN spray with you.

Once opened, a GTN spray should be used within 2 years, even if expiry date has not elapsed.

Medication Checklist

- ✓ Keep medicines out of the reach of children
- ✓ Store medicines in original container - clearly labelled
- ✓ Make a list of your medication, including strength, dose and how often they need to be taken (Record on page 24)
- ✓ Your pharmacist can provide blister packs on request
- ✓ Bring your medication or a list of your medication with you to all medical appointments
- ✓ Keep at least a two week supply of medicines at all times
- ✓ Check if any medicine is out of date, and if so, return it immediately to the pharmacy for safe disposal
- ✓ Only take the medicines that have been prescribed for you. Be cautious of mixing them with “over the counter medicines” (including herbal remedies)
- ✓ Always read the possible side effects in the information leaflet supplied. If you are having any side effects from your medicine tell your nurse or doctor immediately
- ✓ Most medicines do not mix well with excessive alcohol
- ✓ Never take an extra dose. If you have missed a dose, wait until the next time you are due to take it
- ✓ Inform your doctor if you become pregnant
- ✓ Do not stop taking your medicines unless advised to do so by your doctor or nurse
- ✓ Most heart medicines are long term or even life-long treatments. An alternative can be prescribed if a medication does not agree with you.

Medication Name	Reason for Medication	Dosage	When				Additional Information
			AM	MM	PM	Night	



Croi House,
Moyola Lane, Newcastle,
Galway, Co. Galway



+353 (0)91 544 310



info@croi.ie



www.croi.ie



Croi Heart & Stroke Charity



@CroiCharity