



Waitematā
District Health Board

Best Care for Everyone

Medicines for Coronary Artery Disease

What you need to know

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Information

Contact North Shore or Waitakere Hospital (09) 486 8920 and ask for the Cardiology Service if you want this information in Chinese, Korean or Samoan. An interpreter can be arranged for clinic appointments if you need one.

For 24-hour health advice, contact Healthline 0800 611 116 or visit www.healthline.co.nz

For further resources, visit www.healthnavigator.org.nz or www.mymedicines.co.nz and www.heartfoundation.org.nz

Ask questions

This booklet may not tell you everything you'd like to know about your medicines.

Talk to your doctor, pharmacist or nurse if you do not understand or want to know more.

Glossary of terms

Diarrhoea	Loose bowel motion (stool)
Herbal supplements	Natural remedies, vitamins or minerals
Nausea	Feeling as if you might vomit
Potassium	Natural chemical in your body and some foods
Side effect	An unintended effect from taking a medicine

What is coronary artery disease?

Coronary artery disease refers to the narrowing of arteries supplying the heart muscle, and is the main cause of angina and heart attack.

If you have had a heart attack, bypass surgery, angioplasty or have angina, you will need medicine which helps to:

- lower the chance of you having a heart attack
- prevent your heart condition from getting worse.

Medicines for coronary artery disease

Taking medicines is an important part of your treatment. You will need to take many types because each medicine works differently. Using them together gives the best effect. These medicines, when taken as prescribed, will:

- lower your blood pressure and heart rate
- lower your cholesterol
- reduce blood clotting
- support damaged heart muscle
- help prevent a further heart attack.

It is important that you:

- **take your medicines as prescribed; do not miss doses or you could become unwell and may need to go to hospital**
- don't stop taking any of your medicines, or you may be at risk of a heart attack
- talk to your pharmacist or doctor before you take any other medicines including herbal, traditional or natural remedies.

Is there anything you should avoid?

Talk to your doctor or pharmacist before you use any other medicines, including medicines you may buy for pain relief. The medicines listed below are non-steroidal anti-inflammatory drugs. They can damage your kidneys and increase the chance of a heart attack. Please avoid the following medicines:

Medicine name	Brand name(s)
Celecoxib	Celebrex [®] , Celostea [®]
Diclofenac	Apo-Diclo [®] , Diclohexal [®] , Voltaren [®]
Etoricoxib	Arcoxia [®]
Ibuprofen	Advil [®] , Brufen [®] , Ibugesic [®] , I-Profen [®] , Nurofen [®]
Mefenamic acid	Ponstan [®]
Naproxen	Naprosyn SR [®] , Noflam [®]

Anti-clotting medicines

Aspirin

Aspirin helps to reduce blood clotting and lowers your chance of having a heart attack.

The dose of aspirin used to stop blood clots should be 75mg or 100mg daily, with food (this is much lower than what you would take for pain relief).



Different types of aspirin

Common name

Brand name(s)

Soluble aspirin

AsproClear® Cardiprin® Disprin® Solprin®

Coated aspirin

Aspec® Aspia® Cartia® Heartcare Aspirin®



What are some of the side effects?

The dose of aspirin used is so small that most people don't get side effects from it. **Always take your aspirin with food. Tell your doctor if you have stomach ache or pain or unusual bruising.**

Phone your doctor straight away if you:

- get short of breath or wheeze
- vomit – and it's brown coffee coloured vomit
- notice that you are bleeding.

Clopidogrel and ticagrelor

Clopidogrel (Arrow-Clopid®) and ticagrelor (Brilinta®) work in a similar way to aspirin. If you have just had a heart attack or stroke, you may be given clopidogrel or ticagrelor; they will reduce the chance of you having another heart attack. If you have been in hospital with unstable angina or acute coronary syndrome, or heart attack, or if you have a heart artery stent fitted, you will also be given aspirin. Tell your doctor if you have had a stomach ulcer or condition that causes bleeding. It is important you take clopidogrel or ticagrelor every day and finish your course (up to 12 months).

Do not stop taking these without checking with your doctor or you will be at increased risk of a blood clot, heart attack or stroke.

Warfarin

Warfarin helps to stop blood from clotting. Warfarin may be given to you if your heart beats irregularly (atrial fibrillation or AF). It can also be used to treat a deep vein clot in the leg (deep vein thrombosis or DVT), a clot in the lung (pulmonary embolism or PE), a clot in the heart - or to prevent a clot, if you have an artificial heart valve.

You will need to have regular blood tests to make sure the dose is right for you. These are called International Normalised Ratio (INR) blood tests. Talk to your doctor or pharmacist about this.

Dabigatran

Like warfarin, dabigatran (Pradaxa®) is used to prevent blood clots if you have an irregular heartbeat (atrial fibrillation or AF), or if you have recently had hip or knee surgery.

If you are taking dabigatran, always swallow the capsule whole with a big glass of water and do not lie down for 30 minutes immediately afterwards.

Let your doctor know if you have heart burn or dyspepsia.

Is there anything you should avoid?

If you are taking any anticlotting medicines, talk to your pharmacist or doctor before you take any other medicines, including medicines you buy yourself.

Some types of medicine used for pain relief (NSAIDs or non-steroidal anti-inflammatory drugs) can cause bleeding and stomach ulcers when used together with aspirin and other blood-thinning medicines. See page 4 for a list of these medicines.

Some herbal supplements can cause bleeding and these should not be used. These include:

feverfew

ginseng

garlic

saw palmetto

ginger

white willow

gingko biloba

vitamin E

Let your doctor know if you notice any unusual bruising or bleeding, especially if your anticlotting medicines have changed.

ACE inhibitors (angiotensin-converting enzyme inhibitors) and ARBs (angiotensin receptor blockers)

ACE inhibitors work by lowering blood pressure and helping the heart to recover and work better after a heart attack.

ARBs (candesartan and losartan) have the same effect as ACE inhibitors but work in a slightly different way.

Names of some ACE inhibitors and ARBs

Medicine name	Brand name(s)
Candesartan	Atacand® Candestar®
Cilazapril	Zapril®
Enalapril	Renitec®
Lisinopril	Arrow-lisinopril®
Losartan	Cozaar®
Perindopril	Apo-Perindopril®
Quinapril	Accupril®

Some of these medicines have a diuretic (to remove excess water) added to them in the same tablet. These include Accuretic®, Apo-Cilazapril/Hydrochlorothiazide® and Hyzaar®.

When you first start an ACE inhibitor or ARB

You may feel light-headed, dizzy or feel faint, especially after your first dose. Get up slowly; take a few minutes to sit on your bed or on a chair first.

Your body should get used to the medicine in a few days. **You may be asked to start with a low dose and then increase it slowly over a few weeks.**

You will need regular blood tests to check your kidneys. This is because a few people have problems with their kidneys when they take these medicines.



What are some of the side effects?

Some people may get:

- a dry cough
- a headache
- nausea or vomiting
- dizziness or faintness

- a rash (rare)
- a change in their taste (rare).

Tell your doctor if any of these things happen to you. Sometimes these side effects can happen straight away, sometimes they can happen months later. If you are taking an ACE inhibitor and get a dry cough, let your doctor know, you may be changed to an ARB (candesartan or losartan).

Some side effects can be serious but are rare. Phone your doctor straight away if your lips, throat or tongue swell up.

Do not use salt substitutes such as NoSalt[®], Salt Substitute[®], Lite Salt[®]. These products have potassium in them; ACE inhibitors and ARBs also increase the amount of potassium in your body.

Beta blockers

Beta blockers are medicines that help to:

- lower blood pressure and slow the heart rate
- prevent angina (chest pain/discomfort)
- lower the chance of heart attack and improve survival if you have had a large heart attack
- improve the strength of the heart if it is weak.

Names of common beta blockers

Medicine name	Brand name(s)
Atenolol	Mylan Atenolol®
Carvedilol	Dilatrend®, Dicarz®
Bisoprolol	Bosvate®
Celiprolol*	Celol®
Metoprolol	Betaloc CR®, Lopresor®, Myloc CR®
Sotalol	Sotacor®

*Grapefruit and oranges as fruit juice or marmalade can affect **celiprolol**; talk to your pharmacist about this

Before you start a beta blocker

Tell your doctor if you have asthma, beta blockers might make it worse.

When you first start a beta blocker

- It can take a while for you to feel better – usually a few months.
- You will start with a low dose that will be slowly increased over a few weeks.

**Do not suddenly stop taking your beta blocker or your condition will get worse.
This can be dangerous, talk to your doctor first.**

What are some of the side effects?

When you first start a beta blocker, or have your dose increased, you may feel tired or have other side effects for a few days.

These side effects usually go away. Tell your doctor if you get any of these feelings and they do not go away:

- cold hands and feet
- dizziness or tiredness
- nightmares or sleep problems
- constipation or diarrhoea
- rash or itching
- depression
- nausea
- impotence.

Some side effects can be serious but are rare. Phone your doctor straight away if you are wheezing, or feel as if you might faint.

Calcium channel blockers

These may be used to help lower blood pressure and relieve symptoms of angina. Calcium channel blockers work by:

- expanding the coronary arteries and increasing blood flow to the heart muscle
- lowering blood pressure and reducing the workload on the heart
- slowing a rapid heart rate and controlling irregular heart rhythms (verapamil).

Names of common calcium channel blockers

Medicine name	Brand name(s)
Amlodipine	Norvasc [®] , Ozlodip [®]
Diltiazem	Cardizem CD [®] , Dilzem [®]
Felodipine	Felo ER [®] , Plendil ER [®]
Verapamil	Isoptin [®]

What are some of the side effects?

When you first start a calcium channel blocker, you may have a headache or have hot flushes. These side effects usually go away. Tell your doctor if you get any of these feelings and they do not go away:

- headache
- hot flushing
- swelling in your ankles
- constipation or diarrhoea
- dizziness or feeling faint.

Some side effects can be serious but are rare. Phone your doctor straight away if your lips, throat or tongue swell up. Do not suddenly stop taking your calcium channel blocker; this can cause angina.



Cholesterol (lipid) lowering medicines

These medicines are used to treat high levels of cholesterol in your blood. Statins are a group of cholesterol lowering medicines that help to reduce the risk of a heart attack.

There is 'good' (HDL) and 'bad' (LDL) cholesterol. These medicines will help to lower your 'bad' cholesterol. This means less fat will build up in your blood vessel walls.

You will need to have blood tests to measure your cholesterol levels and see how well your medicine is working. Your doctor will do this every 1-3 months until your levels are controlled, then about every 6 months.

The cholesterol levels that you should aim for are:

Type of cholesterol	Ideal level (mmol/L)
Total cholesterol (TC)	↓ less than 4
LDL cholesterol (bad cholesterol)	↓ less than 1.7
Triglycerides	↓ less than 1.7

If you are a smoker, get support to stop smoking. This will halve your risk of heart disease within a year, and reduce your risk of having a heart attack. Using Nicotine Replacement Therapy (NRT) will increase your chance of quitting and lessen your withdrawal symptoms. To find your local stop smoking service visit www.smokefree.org.nz or call **0800778778** or text **4006**

A healthy diet (reduced saturated fats and sugar) and regular exercise will help lower your cholesterol levels further. Your doctor, nurse or pharmacist can give you more information about this.

Names of common medicines

Medicine name	Brand name(s)
Atorvastatin	Lipitor [®] , Lorstat [®] , Zarator [®]
Bezafibrate	Bezalip [®]
Ezetimibe	Ezemibe [®] , Ezetrol [®]
Pravastatin	Cholvastatin [®]
Rosuvastatin	Crestor [®]
Simvastatin	Lipex [®] , Arrow Simva [®]

Some people may be given ezetimibe and simvastatin, or given these combined into one tablet called Zimybe[®]

What are some of the side effects?

Most people do not get side effects from these medicines, but if you notice severe muscle pain or weakness, phone your doctor straight away.

Let your doctor know if you have:

- continuous muscle pain
- upset stomach or vomiting
- diarrhoea or constipation
- impotence (with bezafibrate)
- skin rash
- tiredness.

Is there anything you need to avoid?

Always check with your doctor or pharmacist before taking any other medicines

Grapefruit as fruit, juice or marmalade can affect simvastatin, Atorvastatin and Zimybe[®]; talk to your pharmacist about this. Pravastatin and rosuvastatin are not affected by grapefruit.



Other medicines you may be taking

Diuretics (e.g. eplerenone, furosemide, spironolactone)

These take extra fluid out of your body by making you go to the toilet (pass water) more often. Spironolactone or eplerenone may be given to support a damaged heart, rather than as a diuretic.

Nitrates

Glyceryl trinitrate (GTN) is a quick-acting nitrate medicine that is used to treat angina (chest pain). It is taken as a spray (Nitrolingual® or Glytrin®) or tablet (Lycinate®) under your tongue. Your doctor should already have given you this. **See the back page of this booklet for your *Angina Action Plan*.**

Check the expiry dates on these medicines and renew them if they have expired, even if you still have some left.

Long-acting nitrates (Duride® or Ismo®) are given to some people to prevent angina attacks.

Medicines for erectile dysfunction

These medicines include sildenafil (Avigra®, Silvasta®, VEDAFIL® or Viagra®), tadalafil (Cialis®), vardenafil (Levitra®). **Check with your doctor if you are taking these medicines because they should not be taken with medicines for angina. It is very dangerous to take these medicines with nitrates (GTN spray or tablets). If you have chest pain while taking medicines for erectile dysfunction, call an ambulance.**

If you need more information about any of these medicines, please talk to your pharmacist doctor or nurse.

Tips to help you with your medicines

- Take your medicines at meal times to help you remember.
- Ask your pharmacist if they can put your medicines in a blister pack, or use a pill organiser box (from your pharmacy).
- Keep a list of your medicines and when to take them (or use a *yellow card*).
- Ask your doctor or pharmacist to list your medicines on a *yellow card*.

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Please bring this when you go to...

- your doctor
- your pharmacy
- your specialist(s)
- outpatient clinics & hospital (please bring all your medications too)
- emergency clinics
- your dentist

and when you travel

Name:

Allergies:

GP's name:

Usual Pharmacy:

Date of card:

Keep your card up-to-date. If your medications or doses change don't forget to up-date your card.

Card ___ of ___

My Medications

Take your medicines list or yellow card with you whenever you go to the pharmacy, doctor, hospital and if you go away on holiday.

What should you do if you forget your medicines?

- It is important that you remember to take your medicines.
- **If you do forget, take it as soon as possible.**
- Do not take double doses at the same time.
- **If it is almost time for your next dose, don't take the dose you missed; wait and take your next dose at your normal time.**

What if you think you have other side effects?

If you think one of your medicines is giving you a side effect that is not in this booklet, talk to your doctor or pharmacist.

What if any of your medicines look different or the names change?

- Talk to your pharmacist or doctor if the name on your medicine packet or bottle has changed, or if your medicine looks different.
- Check you have received the correct medicine before you leave the pharmacy.

How should you store your medicines?

- Keep your medicines in a cool, dry place; do not leave them in places that get sun or in the bathroom where it can be damp.
- **Keep them out of reach and out of sight of children.**
- Return your unused or expired medicines to your pharmacy to dispose of safely.

ANGINA ACTION PLAN




01



- ▶ Stop what you are doing and rest now
- ▶ Tell someone how you are feeling
- ▶ Take 1 puff of your GTN spray, or 1 tablet under your tongue

02



- ▶ After 5 mins if your symptoms have not been relieved, take 1 more puff of your GTN spray, or 1 more tablet under your tongue
- ▶  After another 5 mins, if your symptoms have not been relieved, repeat

03

- ▶ After another 5 minutes if you still have symptoms, treat it as a heart attack - dial 111 and ask for an ambulance
- ▶ Chew an aspirin unless advised not to

If your symptoms are relieved, you can resume your activities gently

IMPORTANT - if your angina becomes more frequent, severe, lasts longer or happens when you are doing very little or resting, see your doctor in the next 24 hours

Dial 111 immediately if:

- your pain is more severe (crushing, heavy, tight) than what you usually feel during an angina attack or
- it spreads to your shoulder, neck, jaw or down both arms or
- you are sweating, feel sick, vomit, get short of breath or faint.

Lie flat if you feel faint, or sit up if you are breathless. You may be having a heart attack – minutes matter.

DISCLAIMER: The New Zealand Heart Foundation Action Plan is intended to assist with the management of heart failure in consultation with your doctor or health care professional. This is not a substitute for individual medical advice.

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