

Pharmacotherapy for acute coronary syndromes

On discharge from hospital after a heart attack (or angina episode), many patients are prescribed the medicines outlined in the table below.

DRUG NAME	EXAMPLES OF MEDICINES	MECHANISM OF ACTION	KEY PRACTICE POINTS
Aspirin (a type of antiplatelet)	Aspirin	Prevents blood clots forming. Reduces the risk of heart attack in people who have established heart disease	<ul style="list-style-type: none">• Usually taken lifelong after a heart attack.• For patients taking antiplatelets, especially more than one, bleeding can be prolonged following a wound or injury.• For minor wounds, apply pressure until bleeding stops.• People should seek urgent medical care for severe bleeding.
Other antiplatelets	Clopidogrel Ticagrelor Prasugrel ¹	Prevents blood clots forming. Reduces the risk of heart attack in people who have established heart disease	<ul style="list-style-type: none">• Patients should be advised to inform other health professionals that they are taking an antiplatelet(s).• For patients taking antiplatelets, especially more than one, bleeding can be prolonged following a wound or injury.• For minor wounds, apply pressure until bleeding stops.• People should seek urgent medical care for severe bleeding.

Angiotensin converting enzyme inhibitors (ACEIs)	Ramipril Perindopril	Relaxes blood vessels to reduce blood pressure and reduces workload of the heart.	<ul style="list-style-type: none">• Get up slowly from lying to standing when you first start taking an ACEI/ARB as they can cause dizziness.
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DRUG NAME	EXAMPLES OF MEDICINES	MECHANISM OF ACTION	KEY PRACTICE POINTS
Beta blockers	Metoprolol Bisoprolol Atenolol	Slows heart rate and lowers blood pressure, reducing workload on the heart.	<ul style="list-style-type: none">• Advise your patients that tiredness or fatigue can be expected when they first start taking a beta blocker, or when the dose is increased.• Encourage patients taking beta blockers to speak to their doctor if they experience ongoing tiredness or fatigue.
Short-acting nitrates (Glyceryl trinitrate - GTN)	Pumpspray or tablets	Dilate the coronary arteries improving supply of oxygen to the heart. Used to treat chest pain (angina).	<p>Ensure patients are familiar with the heart attack 'Warning signs' action plan.</p> <p>Advise your patients of top tips for safe use:</p> <ul style="list-style-type: none">• Sit or lie down before using a short-acting nitrate as they can make you dizzy.• Spray or place tablet under the tongue, do not swallow.• If using the spray, ensure the device is primed before use if it hasn't been used in more than a week.• A common side effect after using a short-acting nitrate is headache. This usually subsides quickly after use.• DO NOT take these medicines at the same time as medicines for erectile dysfunction.

Long-acting nitrates (Glyceryl trinitrate – GTN patch or isosorbide mononitrate tablets)	Patch or tablets	Dilate the coronary arteries improving supply of oxygen to the heart. Used to prevent chest pain in people who have had angina (not routinely prescribed after a heart attack).	<p>DO NOT take these medicines at the same time as medicines for erectile dysfunction.</p> <p>Advise your patients of top tips for safe patch use:</p> <ul style="list-style-type: none">• The best place to apply the patch is the chest.• Press the patch into place for 10-20 seconds.• Remove the patch 12 to 14 hours later. It is important to have some time off the patch.• Rotate to a different patch of skin each day. <p>Advise your patients of top tips for safe tablet use:</p> <ul style="list-style-type: none">• Take once each day at the same time each day.• Swallow tablets whole, don't crush or chew.
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¹Prasugrel is not listed on the Pharmaceutical Benefits Scheme for subsidy in Australia.
²ACEI and ARB should not be used in combination unless under specialist advice.
For more information, see the Product Information and Consumer Medicine Information: <https://www.nps.org.au/medicine-finder>
Reference:
Rossi, S. *Australian Medicines Handbook*. Online. 2021. Melbourne.