

Medicines Book

for Aboriginal and Torres Strait Islander Health Practitioners

4th edition

CARPA
Centre Aboriginal Rural Practitioners Association Inc



RPHCM
Remote Primary Health Care Manuals



CRANAplus
improving
remote health

Centre for Remote Health
Alice Springs, 2017

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Preface

The *Medicines Book for Aboriginal and Torres Strait Islander Health Practitioners* covers medicines recommended in the *CARPA Standard Treatment Manual* and the *Women's Business Manual*, and other medicines commonly used in remote primary health care centres.

Remote Primary Health Care Manuals logo

The RPHCM logo, developed by Margie Lankin, tells this story:

The people out remote, where they use the manuals, are coming into their health service. They are being seen from one of the manuals ... desert rose, the colours of the petals. The people sitting around are people who use the manuals – men and women. People who are working for Indigenous health... doctors and nurses and health workers. Messages are being sent out to the community from the clinic, from the people, to come in to the clinic to be seen. Messages about better health outcomes. People are walking out with better plans, better health, better health outcomes.

About this manual

The fourth edition of the *Medicines Book for Aboriginal and Torres Strait Islander Health Practitioners (Medicines Book)* has been produced as part of the suite of Remote Primary Health Care Manuals, through a collaboration between the Centre for Remote Health, Central Australian Rural Practitioners Association, Central Australian Aboriginal Congress, and CRANApplus. The other manuals in the suite are the *CARPA Standard Treatment Manual (CARPA STM)*, the *Minymaku Kutju Tjukurpa Women's Business Manual (WBM)*, and the *Clinical Procedures Manual for remote and rural practice (CPM)*.

The *Medicines Book* does not stand alone, and does not claim to be fully comprehensive as it has been simplified for ease of use. It is intended to supplement other medicine reference books such as the *Australian Medicines Handbook (AMH)*, *Therapeutic Guidelines* and *MIMS*. Dosage and prescribing guidelines have not been included. Refer to the *CARPA STM*, *WBM*, or your medicine reference book for these.

Your input

Feedback is an essential component of keeping the manuals 'by the users for the users'. Please submit your suggestions and comments via either

- Online feedback form at www.remotephcmmanuals.com.au
- Email to remotephcmmanuals@flinders.edu.au

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Oversight of the review process was provided by the Remote Primary Health Care Manuals Editorial Committee.

Contributors

Thank you to the practitioners, from all over Australia, who volunteered their time and expertise to ensure the manual remains evidence-based, relevant, practical and user-friendly. More information about the review process can be found at www.remotephcmanuals.com.au/home.html. This acknowledges those contributors known to us. Due to the large number of volunteers, we have only recorded the highest level of participation.

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Using the Medicines Book

The Medicines Book is designed to be used by clinicians, especially Aboriginal and Torres Strait Islander health practitioners (ATSIHPs) who

- May not be able to access or read other common medicine reference books
- Are able to supply and monitor medicines (eg under state or territory legislation)
- Want to share information on medicines with patients who have low levels of English literacy.

How the manual is set out

- Medicines are grouped under chapter headings according to their use, in the same way as in the Australian Medicines Handbook (eg Analgesics, Eyes, Respiratory)
- Within each chapter medicines (active ingredients) are in alphabetical order. A list of all the medicines (active ingredients) in the book, in alphabetical order with page numbers, starts on page 2
- The following information is included for each medicine
 - **Active ingredient**, and other medicines that belong in the same group
 - Illnesses and conditions the medicine is used to treat
 - Simple information about how the medicine works
 - Common side effects, and serious side effects (even if rare)
 - Warnings about the medicine including
 - Safety in pregnancy and breastfeeding
 - Cautions when the person has other medical problems
 - Important interactions with other medicines, drugs or foods
 - Information to tell the person when supplying the medicine
 - Patient checks that may need to be done.

Terms

Indigenous

In this manual the term Indigenous is used to mean both Aboriginal and Torres Strait Islander Australians. We mean no disrespect by using this inclusive term for different cultural groups and apologise for any discomfort or sorrow it may cause.

Abbreviations

Abbreviations and acronyms may be used without explanation. There is an abbreviation list, including acronyms, in the reference section.

Online version

The *Medicines Book for Aboriginal and Torres Strait Islander Health Practitioners* is available online as part of the Remote Primary Health Care Manuals at: www.remotephcmanuals.com.au

Medicines (active ingredients) — alphabetical

See Index for full list of active ingredients, brand names

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Patient education

Tell the patient

- **Everything they want to know about their medicines.**
Contact pharmacist if there are any questions you can't answer. Show them pictures to help explain
 - If person travelling — give them a list of their medicines, and a copy of prescriptions with repeats so they can get them filled at other clinics
- **Medicines can be DANGEROUS (especially for children).**
Lock medicines in a safe dry place where kids can't see them or get to them
- **Medicines must be stored properly to work properly.**
Always check packet to see how they should be stored — some must be kept in the fridge
- **Medicines have 'use-by' dates.** Some only last for 1 month after being opened. Always check packet to see if medicine is still in date and how long it will work after being opened. Write this on label
- **Bring all their medicines with them when they come to clinic.** Makes it easier to change their medicines and make sure any old and out of date ones are destroyed safely
- **Some medicines may not be needed** if they exercise, eat well, try to keep themselves and their surroundings clean
- **Do not**
 - **Do not** share medicine with another person — it could harm them
 - **Do not** take medicine that is out of date
 - **Do not** chew, cut or crush slow-release tablets
 - Only cut tablets that have a line on them. Use a sharp knife on a piece of clean paper towel
 - **Do not** throw medicines in the bin — bring them back to clinic



Tell the patient about chronic disease medicines

Causes of chronic disease

- Since the 1980s, most people (both Indigenous and non-Indigenous) have stopped being as active as they were before — less walking, running, hunting, or exercising in other ways
- People spend a lot of time sitting in front of televisions, computers, or games. Because humans are designed to move and be active, this makes us weak and unwell
- The way we eat can also make us unwell. Many people
 - Eat **more** than they need — not much energy is needed to sit for most of the day
 - Eat the wrong types of food — too much fat, sugar and salt, not enough fruit and vegetables
- Smoking, and drinking too much alcohol (grog), can make chronic diseases worse and cause illnesses of their own



Chronic diseases

- As a result of this modern lifestyle many people are overweight, have blood vessels blocked by fat and a weakened heart — and are likely to develop one or more chronic (long-term) diseases
- Chronic disease include problems with **high blood pressure (BP), high blood glucose (sugar), and fats in the blood (cholesterol)** that can speed blocking of arteries and damage your
 - Heart — leading to heart attacks
 - Brain — leading to stroke
 - Kidneys — leading to kidney trouble and dialysis
 - Eyes — leading to eye trouble and blindness

Chronic disease medicines

- Medicine can help to bring high BP, blood glucose, and blood fat levels down to a safe level

Early treatment = less damage

- Taking medicines can be hard, especially long-term medicines for chronic disease
- You may not feel any different when you take the medicine but it is working to reduce damage to your organs

- Some people will need to take medicines all their lives because of existing damage to arteries or kidneys, or other problems they were born with (congenital problems)
- More exercise, eating healthy food, not smoking, and drinking in moderation may help reduce the need for medicines



Tell the patient

- Have regular check-ups
- Know your medicine and remember to take your medicine
- Medicines are only one part of looking after your health
- Change daily lifestyle



- Move more as part of your day, spend less time sitting in front of screens



- Eat a range of good food, and try not to eat more than you need



- Quit or cut down smoking



- Cut down on alcohol (grog)

Common chronic disease medicines

Condition	Medicine groups
High BP	ACE inhibitors (p102), ARBs/sartans (p106), beta-blockers (p110), calcium channel blockers (eg amlodipine p112 , diltiazem p114), thiazide diuretics (p130)
Blood glucose	Gliptins (p158), insulin (p162), metformin (p164), sulfonylureas (p168)
Blood clots	Aspirin (p86), warfarin (p100)
Cholesterol	Statins (p128)

How the medicine monographs are set out

There are 2 pages of information for each monograph.

Australian Medicines Handbook (AMH) medicine classification.

Example: Amoxicillin is classified as

ANTI-INFECTIVE — Antibacterial — Penicillins

→ **CHAPTER** — Medicine use — Medicine group

Page 1

<p>Active ingredients (generic name)</p>	<p>Information in this section</p> <ul style="list-style-type: none"> • ACTIVE INGREDIENT/S of the medicine • Pictures showing how the medicines may be given (eg tablets, injection) • Brand names of medicines containing this active ingredient • Other medicines from the same drug group • Combinations: Medicines from this group that are with medicines from a different group (if any)
<p>What is it used for</p>	<p>Information in this section</p> <ul style="list-style-type: none"> • The main reasons this medicine is prescribed • Where this medicine is found in the CARPA Standard Treatment Manual, Women's Business Manual, Clinical Procedures Manual
<p>How it works</p>	<p>Information in this section</p> <ul style="list-style-type: none"> • A simple explanation of where and how the medicine works in the body
<p>Side effects</p>	<p>Information in this section</p> <ul style="list-style-type: none"> • Lists the main side effects • Tell the patient about these, but also tell them not everyone will get side effects



Chapter — body system
or type of condition

Australian Medicines Handbook (AMH) reference number.

Example: Amoxicillin is 5.1.8

AMH 2017 section number

Page 2

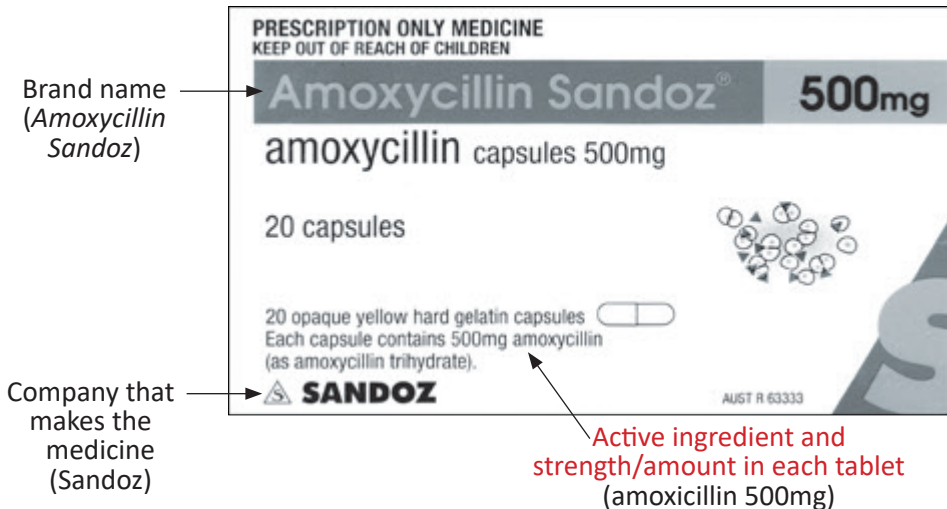
 Warnings	Information in this section <ul style="list-style-type: none"> • Lists the problems or conditions that may make this medicine dangerous to the patient • Contact doctor if your patient has any of these conditions
	Interactions <ul style="list-style-type: none"> • Lists other medicines, drugs or foods this medicine should not be taken with • Contact doctor if your patient is taking anything on this list
 Tell the patient	Information in this section <ul style="list-style-type: none"> • Lists the things you should tell the patient when giving out this medicine
	Warning stickers <ul style="list-style-type: none"> • Lists stickers (p298) used to remind patients of special instructions for this medicine (eg Take with food, Do not drive)
Check	Information in this section <ul style="list-style-type: none"> • Lists the things you need to check (eg blood tests, blood pressure)

Active ingredients, generic and brand names

- Every medicine has at least one **active ingredient** — the chemical that affects the body and makes the medicine work (eg paracetamol, aspirin). There are usually other (inactive) ingredients that control things like how it dissolves, how easy it is to swallow, or the colour
- **Make sure you know active ingredient/s of the medicine.** Name of active ingredient and its strength are on the medicine's label. Usually in small print, or it will say 'Each tablet contains', then list the active ingredient/s. If you are not sure check with the doctor or pharmacist
- **Combination medicines** have 2 or more **active ingredients** (so the name can be very long). This manual shows the active ingredients of combination medicines and common brand name/s. *Example:* Combination ear medicine dexamethasone + framycetin + gramicidin is called *Sofradex* by one company and *Otodex* by another
- The term **generic name** can be confusing — may refer to **active ingredient** (eg paracetamol) *OR* may refer to a less expensive brand
- Companies that make and sell medicines give them a **brand name**. There can be many brand names — common ones are listed in *italics* in the monograph and in the index at the back of the book ([p315](#)). The brand used by your clinic can change
 - *Example:* Paracetamol is called *Panadol*, *Panamax*, *Febridol*, and *Paralgin* by different manufacturers.

Finding active ingredient and its strength on medicine packet

Active ingredient can be written in more than one place, many medicines look the same — check carefully that you have the right one



On combination medicine packet

Brand name
(Curam Duo Forte)

Company that makes the medicine
(Sandoz)

Active ingredients and strength/amount in each tablet
(There are 2: amoxicillin 875mg and clavulanic acid 125mg)

Different forms of medicines

Medicines come in different **forms** as well as different **strengths**.

- Different forms include liquids, tablets, capsules, skin patches, injections, suppositories, wafers, depots
- There are also **slow-release** medicines
 - Medicine is released slowly and evenly into the body so person can take it less often (eg only once a day)
 - Confusing slow-release and immediate-release forms of a medicine, and giving the wrong form of the medicine, can make the person very sick by increasing or decreasing the amount of medicine in their blood
 - **Do not** chew, crush or cut slow-release or coated tablets
 - Types of slow-release medicines include
 - SR — sustained release or slow-release
 - XR or ER — extended release
 - CD — controlled delivery
 - CR — controlled release
 - OROS — osmotic-controlled release oral delivery system
- Always check doctor's order against medicine to make sure it is the right form

Side effects

- Most medicines have more than one effect
 - Good (wanted) effects are why the medicine is prescribed
 - Bad (unwanted) effects are called side effects (or adverse effects)
- **This book does NOT show ALL side effects**, only the most common and serious. **Remember:** Not everyone gets side effects
- Side effects can sometimes take weeks to happen
- Mild side effects often go away after a few days
- **Serious** side effects must be reported to doctor so treatment can be changed
- **Dangerous** side effects can be a risk to person's life (eg anaphylaxis)
- If person has a new problem — ask if new medicine started
 - New problem may be **side effect** *OR* may be new problem from disease
 - **Always tell doctor about it**

Record all side effects from medicines in file notes so other ATSIHPs, doctors or nurses know for next time.

Interactions

- If a medicine is taken with another medicine, drug (including alcohol and tobacco), or certain foods — the medicine may not work properly *OR* it may become too strong (this can be dangerous). This is called an **interaction**
- **Always check** what other drugs person is taking and the interaction list
 - If there could be an interaction — **always check with doctor**
- If person needs to take 2 medicines that interact — they will be carefully monitored by doctor
- **This book does NOT list ALL interactions**, only the most common and serious (even if rare)

For more information

- **Contact doctor or pharmacist**
- Look in other medicine reference books — *Australian Medicines Handbook*, *MIMS*
- Call Medicines Line on **1300 633 424** (1300 MEDICINE)
 - Monday to Friday 9am to 5pm EST except for NSW public holidays

What the pictures mean

The pictures make it easier to explain things to your patients. Make sure you know what the following pictures mean.



Caution or warning symbol — you will need to pay special attention. This could be a serious situation — a potential emergency.



Caution or warning symbol and phone — this could be a serious or risky situation — always get help.



Triple whammy — dangerous combination of 3 common medicines, can cause kidney failure: ACE inhibitor ([p102](#))/ARB ([p106](#)) + diuretic + NSAID ([p222](#)).



Allergy/trouble breathing — could be an allergic reaction that affects person's breathing.



Put tablet under tongue (sublingual) or inside cheek (buccal). Do not swallow tablet.



Take all the tablets — remind person that medicine can't work properly or illness may come back if medicine is not finished.



Slow-release medicine — medicine releases slowly and evenly into body, so it doesn't need to be taken as often. See *Different forms of medicines* ([p11](#))



Eye drops and eye ointments — return these to clinic 1 month after opening.

Special patient groups

These pictures are to remind you that these people may need smaller doses of medicine, or should not take this medicine.

Pregnant



- Always ask a woman of childbearing age if she is or could be pregnant — do pregnancy test if not sure
- Most medicines taken by a pregnant woman can easily pass from her blood stream through the placenta and into the baby
- Every medicine is put into a category (A, B, C, or D) based on how dangerous it is to the baby. Lowest risk is A, high risk are D, **really dangerous** ones are X
- This picture in the *Warnings* section lets you know medicine is category **C, D** or **X** and could seriously harm the baby
- Always tell doctor or pharmacist if woman is pregnant or planning to become pregnant. Some medicines can be stopped or changed but others may be needed to care for the mother's health. The doctor will assess the risks and talk with the woman about them

Breastfeeding



- Some drugs and medicines can stop the mother making milk, or pass through the mother's milk and harm the baby or stop the baby sucking
- This picture in the *Warnings* section lets you know this medicine should not be used by women who are breastfeeding

Babies and children



- Babies and children are not only smaller than adults but are growing and constantly changing. This affects how medicines are absorbed and eliminated from their bodies
- Always weigh children and check doses carefully

Old people

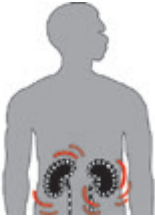


- Old people are more likely to suffer from side effects, medicine interactions, and overdose because they
 - Can't break down and eliminate medicines as well as younger people
 - Are more sensitive to medicines
 - Are usually taking more than 1 medicine at a time



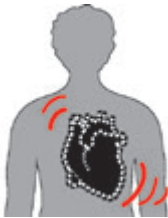
- Remember that old people
 - Are usually prescribed the smallest possible dose
 - May have trouble swallowing medicine. Advise them to take with lots of water, check if OK to break or crush tablets
 - May need help remembering to take medicines — check if they need a dose aid, or if they have a carer who can help

Kidney trouble



- Indigenous people are more likely to have kidney trouble
- If patient has kidney trouble or kidney failure — usually needs lower doses of medicines (or can't take some medicines) because their kidneys can't break down and remove medicine from their bodies

Other trouble or illnesses the patient may already have



- Shown by picture with red lines around body part affected (eg liver trouble, kidney trouble, heart trouble)
- These pictures mean that the medicine can make these problems worse
- Also see *Anatomy dictionary* ([p307](#))

References to *Australian Medicines Handbook (AMH)*

- Each medicine protocol in this manual includes an *AMH* reference number
- *AMH* is a standard Australian reference book for medicines. All clinics should have current edition
- *AMH* is divided into chapters according to the body system or type of condition the medicine treats, (eg cardiovascular system or allergies), then medicine use, medicine group, and active ingredient

For example

Amoxicillin is found in ***AMH* Section 5.1.8**

- **5** is the chapter (Anti-infectives)
- **1** is the medicine use (Antibacterial)
- **8** is the medicine group (Penicillins)
- Active ingredient is Amoxicillin

6 steps to follow when supplying a medicine

STEP 1 — Get the story

Use assessment and examination procedure such as SOODA-F (*CPM p117*) or SOAPF

STEP 2 — Follow the RIGHTS

RIGHT patient

- **Make sure you have right patient and right set of records**
 - Ask person's name, date of birth, bush name, next of kin
 - Check person's name and date on prescription

RIGHT medicine

- **Check** name and spelling of medicine against prescription
- Check use-by/expiry date on package
- **Is it safe for this person**
 - **ALWAYS ask about** allergies, pregnancy, breastfeeding, other medical problems (eg kidney trouble), other medicines including over the counter and bush medicines
- Could it interact with other medicines the person is taking
- Is it in *CARPA STM* or *WBM*
- Look up in reference manual (eg *AMH*, *Medicines Book*). What is it, how does it work, what is it used for
- Am I allowed to give the medicine or do I need to contact the doctor or pharmacist

RIGHT dose

- Check dose on prescription and in reference manual (eg *CARPA STM*, *WBM*, *AMH*)
- Check strength — medicine can be packaged in different strengths and forms
- Measure dose carefully using proper equipment
- If dose is by weight — check person's weight. **Always** weigh children
- Watch and help parent/carer give first dose to children

RIGHT route

- Check how to give (administer) medicine
 - Oral — tablets, syrups, sublingual, buccal
 - Injection — IM, IV, subcut
 - On the skin — transdermal, topical

RIGHT time

- Check how and when medicine should be taken — night, morning, with food, on empty stomach
 - Use times that are meaningful to the person

RIGHT documentation

- Record medicine administered/supplied in file notes. Include active ingredient, dose, frequency, quantity supplied (eg dicloxacillin 500mg 4 times a day [qid], 24 caps)

RIGHT to refuse

- Person may not want to take medicine you give them
- Make sure person knows reason for the medicine so they can make an informed decision
- If person doesn't want to take medicine — try to find out why, a different medicine may be appropriate
- If person still doesn't want to take medicine — always document this

STEP 3 — Label the medicine

KEEP OUT OF REACH OF CHILDREN	
DRUG <i>Metformin</i>	STRENGTH <i>500mg</i>
Take <i>one (1)</i> tablets/capsules/mL <i>three (3)</i> times a day or <i>with food</i> as directed.	
Patient <i>Peter Jones</i>	
Issued by <i>Ross Colins ATSIHP</i>	Date <i>20/4/18</i>
CLINIC <i>Mt Eagle Clinic NT ph8912 3456</i>	Qty <i>100 tabs</i> <i>Use by Aug 2020</i>

1.1

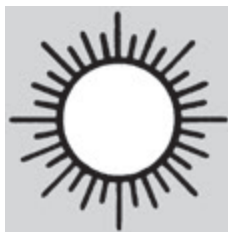
See example of completed medicine label — F 1.1

- Written in red on white background — **KEEP OUT OF REACH OF CHILDREN**
- Name (active ingredient) of medicine
- Strength (eg microgram, mg, g) and form (eg liquid, tablet, capsule)
- Total number of tablets or amount of liquid in package
- How to take it. Dose and number of times a day — 'Take 2 tablets 3 times a day'
- Name of patient
- Name, address and phone number of clinic
- Your name or initials
- Date you gave out medicine
- Medicine use-by/expiry date — take from original packet
- Prescription reference number (if your clinic uses these)
- Special directions — 'Take with food', 'Keep in fridge'
 - Use warning stickers ([p298](#)) if your dispensary has them

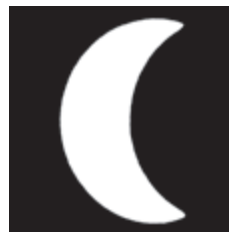
- Use medicine time stickers for people with poor English or eyesight
 - Morning/evening — F 1.2
 - Middle of the day — F 1.3
 - Night time, before bed — F 1.4



1.2



1.3



1.4

STEP 4 — Check what you have done and write in file notes

- See *Recording in the file notes* (CPM p116)

STEP 5 — Before giving medicine make sure person knows

- Why they are taking the medicine
- Possible side effects and what to do about them
 - Explain common side effects and side effects that are rare but important
- Important messages from *Tell the patient* (p5)
- When and how to take it
 - Does it need to be taken with or without food
 - Use times that have meaning for the person
- How to store it (eg in fridge, away from children)



- Give clear instructions in best language for person
- Ask person to repeat what you told them to make sure they understand
- Give instructions in writing and pictures. Written instructions for all medicines are a legal requirement






STEP 6 — Check before finishing


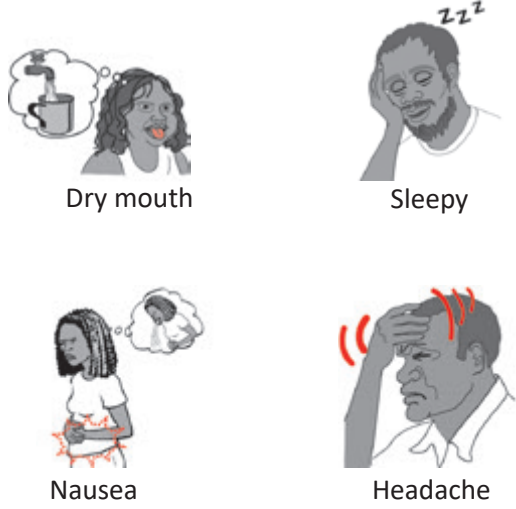
- Are tests needed (eg blood tests)
- Does person need to come back to clinic, when




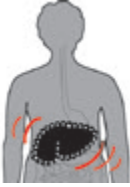





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<p>Active ingredients (generic names)</p>	<p>ADRENALINE (EPINEPHRINE) (a-dren-a-lin [ep-in-ef-rin]) Common brands include: self-injecting pens — <i>Anapen</i>, <i>EpiPen</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Anaphylaxis — severe allergic reaction (<i>CARPA STM p30</i>) Doses — <i>CARPA STM p17</i> • Cardiac arrest — when heart stops (<i>CARPA STM p10</i>) Doses — <i>CARPA STM p17</i> • Shock
<p>How it works</p>	<ul style="list-style-type: none"> • The body makes its own adrenaline to deal with allergy and shock • Extra adrenaline from outside the body (epinephrine) is sometimes needed quickly to stop anaphylaxis (severe allergic reaction), or to stimulate the heart
<p>Side effects</p>	 <p>Headache Tremor Dizzy</p>








 <p>Warnings</p>	 <p>Do not refrigerate – keep in the dark and below 25°C, but not in fridge</p>  <p>Medical consult straight away – may need another dose</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Take adrenaline (epinephrine) self-injecting pen with you everywhere you go. On hot days, put in esky but not in fridge • Be sure anyone who may need to give you adrenaline knows how and when to give it • Bring adrenaline (epinephrine) self-injecting pen back to clinic when it reaches its use-by/expiry date  <p>Go to clinic straight away after using self-injecting pen – you may need another injection</p>
<p>Check</p>	<ul style="list-style-type: none"> • Note use-by/expiry date of adrenaline (epinephrine) self-injecting pen — make sure you will have stock to replace it




<p>Active ingredients (generic names)</p>	<p>LORATADINE (lo-rat-a-deen) Common brands include: <i>Allereze, Claratyne, Lorastyne</i></p>  <p>Other low sedating antihistamines Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Cetirizine • Fexofenadine
<p>What it is used for</p>	<ul style="list-style-type: none"> • Allergic reactions (eg hayfever) • Itchy eyes (eg fly bite CARPA STM p351) • Itchy rash (eg chickenpox CARPA STM p332)
<p>How it works</p>	<ul style="list-style-type: none"> • Allergic reactions are caused by release of a chemical messenger (neurotransmitter) called histamine • Antihistamines reduce the body's response to allergy by blocking histamine receptors. Promethazine also blocks other receptors to control nausea and prevent vomiting
<p>Side effects</p>	 <p>Dry mouth Sleepy</p> <p>Nausea Headache</p>








 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Children under 2 years</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Medical consult if needed for more than a short time</p> </div>
 <p>Tell the patient</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog) – will make you more sleepy</p> </div> <div style="text-align: center;">  <p>Return to clinic if needed for more than a short time</p> </div> </div>
<p>Check</p>	









<p>Active ingredients (generic names)</p>	<p>PROMETHAZINE (pro-meth-a-zeen) Common brands include: <i>Feneza, Gold Cross Antihistamine, Phenergan</i></p> <p>Other sedating antihistamines Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Dexchlorpheniramine • Diphenhydramine • Doxylamine • Trimeprazine 	  
<p>What it is used for</p>	<ul style="list-style-type: none"> • Allergic reactions (eg hayfever, itch, rash) • Itchy eyes (eg fly bite CARPA STM p351) • Motion sickness (sea or car travel) • Nausea and vomiting (CARPA STM p105) • Sedation (eg penetrating eye injury) (CARPA STM p354) <p>Doses — CARPA STM p442, WBM p382</p>	
<p>How it works</p>	<ul style="list-style-type: none"> • Allergic reactions are caused by release of a chemical messenger (neurotransmitter) called histamine • Antihistamines reduce the body's response to allergy by blocking histamine receptors • Promethazine also blocks other receptors to control nausea and prevent vomiting 	
<p>Side effects</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center; margin: 10px;">  <p>Blurred vision</p> </div> <div style="text-align: center; margin: 10px;">  <p>Dry mouth</p> </div> <div style="text-align: center; margin: 10px;">  <p>Constipation</p> </div> <div style="text-align: center; margin: 10px;">  <p>Dizzy</p> </div> <div style="text-align: center; margin: 10px;">  <p>Sleepy</p> </div> <div style="text-align: center; margin: 10px;">  <p>Breathing trouble – may be slow</p> </div> </div>	



 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Children under 2 years</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>People who have fits</p> </div> <div style="text-align: center;">  <p>Breathing trouble</p> </div> </div>
 <p>Tell the patient</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog) – will make you more sleepy</p> </div> <div style="text-align: center;">  <p>Return to clinic if needed for more than a short time</p> </div> </div>
	<p>Warning stickers (p298): 1</p>
<p>Check</p>	


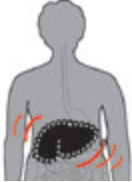




<p>Active ingredients (generic names)</p>	<p>LIDOCAINE (LIGNOCAINE) (li-do-cane) Common brands include: <i>Lignocaine, Xylocaine</i></p> <p>LIDOCAINE (LIGNOCAINE) + ADRENALINE (EPINEPHRINE) (li-do-cane + a-dren-a-lin [ep-in-ef-rin]) Common brands include: <i>Xylocaine with Adrenaline</i></p> <p>LIDOCAINE (LIGNOCAINE) + PRILOCAINE (li-do-cane + pril-o-cane) Common brands include: <i>Emla</i></p> <p>Other local anaesthetics Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Bupivacaine • Cinchocaine • Cocaine • Prilocaine • Procaine • Ropivacaine • Tetracaine (amethocaine) (p186) 	    
<p>What it is used for</p>	<ul style="list-style-type: none"> • Acute heart arrhythmias (CARPA STM p13) • Insect in ear (CARPA STM p182) • Lessen pain of IM injections • Stop bleeding + adrenaline (epinephrine) — head injury (CARPA STM p79), nose bleed (CARPA STM p110) • Stop pain from <ul style="list-style-type: none"> ◦ Bite or sting — stonefish (CARPA STM p95), stingray (CARPA STM p96) ◦ Episiotomy — cutting (WBM p56), repairing (WBM p176) ◦ Ulcers (gel) — genital herpes (CARPA STM p289, WBM p257), mouth ulcers (CARPA STM p338) ◦ Wound management — cleaning (CARPA STM p83), closing (CARPA STM p87) <p>Note: Can use cream or gel on skin or in mouth but won't work as well as injection.</p>	
<p>How it works</p>	<ul style="list-style-type: none"> • Stops pain by blocking transfer of pain messages from skin to brain 	
<p>Side effects</p>	 <p>Rash</p>	







 <p>Warnings</p>	<ul style="list-style-type: none"> • Allergic reaction to local anaesthetics (ask patient/carer)  <p>Medical consult if you need to give more than once</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Injection may sting a little at first
<p>Check</p>	<ul style="list-style-type: none"> • Lidocaine (lignocaine) + prilocaine (eg <i>Emla</i>) applied as patch or cream <ul style="list-style-type: none"> ◦ Cover cream with airtight (occlusive) dressing, leave on for 1 hour before procedure ◦ Effect lasts up to 2 hours












<p>Active ingredients (generic names)</p>	<p>MORPHINE (mor-feen) Common brands include: <i>Kapanol, MS Contin, Morphine MR, MS Mono, Ordine</i></p> <p>OXYCODONE (ox-i-co-don) Common brands include: <i>Endone, OxyContin, OxyNorm</i></p> <p>OXYCODONE + NALOXONE SR (ox-i-co-don + nah-lox-own) Common brands include: <i>Targin</i></p>  <p>Other opioid analgesics Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Buprenorphine • Codeine • Fentanyl • Hydromorphone • Methadone • Pethidine • Tapentadol • Tramadol (p34)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Pain relief <ul style="list-style-type: none"> ◦ Strong acute pain (CARPA STM p381) ◦ Palliative care (CPM p134) <p>Doses: Morphine — CARPA STM p382</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Works in the brain and nerve endings to reduce strong pain 
<p>Side effects</p>	 <p>Sleepy</p>  <p>Vomiting</p>  <p>Itch</p>  <p>Constipation – less with oxycodone + nalaxone combination</p>  <p>Breathing trouble – may be slow</p>




 <p>Warnings</p>	 <p>Pregnant Kidney trouble Liver trouble Breathing trouble</p>  <p>Low BP – use with care if low BP or shock</p>  <p>Old people – use lower dose</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Slow-release tablets or capsules must be swallowed whole • Medicine causes constipation, may need laxatives with long-term use  <p>Drink lots of water – helps stop constipation</p>  <p>Do not drink alcohol (grog)</p>  <p>Do not drive or operate machinery if sleepy</p>
<p>Check</p>	<p>Warning stickers (p298): 1, A (slow-release tablets)</p> <ul style="list-style-type: none"> • Slow-release medicines are 12 or 24 hour. Make sure you have the right one • Make sure patient is using patches properly (CPM p343) • Double check dose and sign register before giving













<p>Active ingredients (generic names)</p>	<p>PARACETAMOL (para-ceet-a-mol) Common brands include: <i>Febridol, Panadol, Panamax</i></p>  <p>Paracetamol combinations Not included in this monograph — see individual monograph for information:</p> <ul style="list-style-type: none"> • Paracetamol + codeine (p32) <p>Paracetamol is in lots of commonly available mixtures and tablets, alone or in combination.</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Mild to moderate pain relief (CARPA STM p380) • Fever • Chronic pain <p>Doses — CARPA STM p380, WBM p381</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces pain by blocking some pain pathways • Lowers fever by reducing production of prostaglandins (hormone-like substances) • Can be combined with stronger pain medicines (analgesics) — so less of the stronger pain medicine is needed 
<p>Side effects</p>	




 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not give adults more than 6 slow-release or 8 regular tablets a day (can cause liver damage) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a few days for adults or 48 hours for children</p> </div> </div> <div style="display: flex; justify-content: center; align-items: center; margin-top: 20px;">  <div style="margin-left: 10px;"> <p>If a lot of tablets taken at once (overdose) – call doctor or ambulance straight away</p> </div> </div> <p style="text-align: center; margin-top: 5px;">Emergency</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Make sure children are given correct dose <ul style="list-style-type: none"> ◦ Children's paracetamol comes in different strengths ◦ Use specially marked medicine cup or dropper • Taking more than 6 slow-release or 8 regular tablets containing paracetamol in one day can damage your liver <ul style="list-style-type: none"> ◦ If taking paracetamol for pain or fever — make sure there is no paracetamol in other medicines you are taking (eg cold medicines) <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic if needed for more than a few days for adults or 48 hours for children <i>OR</i> you have taken too much</p> </div>
	<p>Warning stickers (p298): 19a, A (slow-release tablets)</p>
<p>Check</p>	<ul style="list-style-type: none"> • Children's paracetamol comes in different strengths — check the dose carefully • Do person's other medicines contain paracetamol • If also taking warfarin — monitor INR and decrease warfarin dose if needed





<p>Active ingredients (generic names)</p>	<p>PARACETAMOL + CODEINE 30mg (para-ceet-a-mol + co-dean) Common brands include: <i>Codalgin Forte, Codapane Forte, Panadeine Forte</i></p> <p>PARACETAMOL + CODEINE 15mg Common brands include: <i>Panadeine Extra, Prodeine 15</i></p> <p>PARACETAMOL + CODEINE 8mg Common brands include: <i>Codalgin, Panadeine, Panamax Co</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Pain relief — moderate to strong acute pain (CARPA STM p381) <ul style="list-style-type: none"> ◦ May be in combination with other pain medicines <p>Doses: Paracetamol — CARPA STM p380, WBM p381</p>
<p>How it works</p>	<ul style="list-style-type: none"> • 2 different medicines working together in brain and nerve endings to lessen pain 
<p>Side effects</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center; margin: 10px;">  <p>Sleepy</p> </div> <div style="text-align: center; margin: 10px;">  <p>Vomiting</p> </div> <div style="text-align: center; margin: 10px;">  <p>Constipation</p> </div> <div style="text-align: center; margin: 10px;">  <p>Breathing trouble – may be slow</p> </div> </div>




 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Breathing trouble</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Children under 12 years</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a short time</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Taking more than 6 slow-release or 8 regular tablets containing paracetamol in one day can damage your liver <ul style="list-style-type: none"> ◦ If taking paracetamol-codeine for pain — make sure there is no paracetamol in other medicines you are taking (eg cold medicines) • Medicine causes constipation, may need laxatives with long-term use <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog) — medicine increases effects</p> </div> <div style="text-align: center;">  <p>Drink lots of water — helps stop constipation</p> </div> <div style="text-align: center;">  <p>Return to clinic if needed for more than a short time</p> </div> </div>
	<p>Warning stickers (p298): 1 (30mg codeine), 19a</p>
<p>Check</p>	<ul style="list-style-type: none"> • Do person's other medicines contain paracetamol • Remember to sign the drug register • If also taking warfarin — monitor INR and decrease warfarin dose if needed





<p>Active ingredients (generic names)</p>	<p>TRAMADOL (tram-a-dol) Common brands include: <i>Durotram XR, Tramal/SR, Zydol/SR</i></p>  <p>Other opioid analgesics Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Buprenorphine • Codeine • Fentanyl • Hydromorphone • Methadone • Morphine (p28) • Oxycodone (p28) • Pethidine <p>Opioid combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Tramadol + paracetamol (<i>Zaldiar</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Pain relief (<i>CARPA STM p381</i>) <ul style="list-style-type: none"> ◦ Moderate to severe acute pain ◦ Chronic pain (slow-release formulations)
<p>How it works</p>	<ul style="list-style-type: none"> • Works in brain and nerve endings to reduce moderate to strong pain 
<p>Side effects</p>	 <p>Headache Dizzy Sweating Nausea</p> <p>Trouble sleeping Rash Confusion Constipation</p>


 <p>Warnings</p>	 <p>People who have fits</p>  <p>Pregnant</p>  <p>Old people</p>  <p>Children under 12 years</p>  <p>Liver trouble</p>  <p>Kidney trouble</p>  <p>Breathing trouble</p>
	<p>Interactions — Do not use together without medical consult</p> <p>TRAMADOL with:</p> <ul style="list-style-type: none"> • Antidepressants • Carbamazepine • Ondansetron • Some opioids (eg pethidine, methadone)
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Slow-release tablets must be swallowed whole • Medicine causes constipation, may need laxatives with long-term use  <p>Drink lots of water – helps stop constipation</p>  <p>Do not drive or operate machinery if sleepy</p>  <p>Do not drink alcohol (grog)</p>
<p>Check</p>	<p>Warning stickers (p298): 1, 5, A (slow-release)</p> <ul style="list-style-type: none"> • Slow-release treatments are 12 or 24 hour — check you have right one • Remember to sign the drug register • If also using warfarin — monitor INR and decrease warfarin dose if needed




<p>Active ingredients (generic names)</p>	<p>ANTIVENOMS – Box jellyfish (an-te-ven-oms) Most antivenoms are only available in hospitals.</p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Life threatening bites and stings <ul style="list-style-type: none"> ◦ Box jellyfish (<i>CARPA STM p94</i>) ◦ Snakes and sea snakes ◦ Stonefish 
<p>How it works</p>	<ul style="list-style-type: none"> • Antivenom binds to venom and makes it inactive. This reduces chance of dying from venomous bite <ul style="list-style-type: none"> ◦ Antivenom is usually specific to the type of venomous animal ◦ Some are made up of more than one antivenom. <i>Example:</i> Polyvalent snake antivenom contains antivenom for all dangerous Australian snakes
<p>Side effects</p>	 <p>Headache</p>



 <p>Warnings</p>	<ul style="list-style-type: none"> • Most antivenoms given in hospital due to risk of anaphylaxis  <p>Anaphylaxis</p> <p>Severe allergic reaction (rash, low BP, trouble breathing)</p>
 <p>Tell the patient</p>	 <p>Return to clinic straight away if you get fever, rash, and sore muscles (serum sickness), up to 2 weeks later</p>
<p>Check</p>	<ul style="list-style-type: none"> • Always have anaphylaxis kit (<i>CARPA STM p32</i>) with adrenaline (epinephrine) ready when giving antivenom



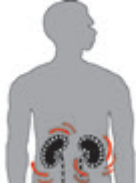

<p>Active ingredients (generic names)</p>	<p>NALOXONE (nah-lox-own) Common brands include: <i>Naloxone Minijet, Narcan</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Reversing the action of too much opioid medicine <ul style="list-style-type: none"> ◦ Morphine over-sedation — see <i>Complications with opioid injections (CARPA STM p382)</i> ◦ Heroin overdose <p>Doses — <i>CARPA STM p440</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Reverses the action of opioid medicines (eg morphine) by attaching to and blocking the parts of the brain (receptors) where opioids work 
<p>Side effects</p>	<ul style="list-style-type: none"> • Agitation  <p>Fast pulse (heart rate)</p> <p>Anxiety (worry)</p> <p>Confusion – if dependent on opioids</p>





 <p>Warnings</p>	<ul style="list-style-type: none"> • Need to repeat dose every 2 minutes until person alert and responsive <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Medical consult straight away</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May need more than 1 dose
<p>Check</p>	<ul style="list-style-type: none"> • Make sure oxygen and ventilation are available • Watch person for at least 2 hours — effects of opioid may return as naloxone wears off. May need to give another dose









<p>Active ingredients (generic names)</p>	<p>THIAMINE (thigh-a-min) Common brands include: <i>Betamin, Betavit</i></p>  <p>Common name: vitamin B1</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Replacing lost thiamine because of <ul style="list-style-type: none"> ◦ Chronic heart failure (<i>CARPA STM p266</i>) ◦ Drinking too much alcohol <ul style="list-style-type: none"> ▪ Alcohol withdrawal (<i>CARPA STM p211</i>) ▪ Before glucose infusion (<i>CARPA STM p91</i>) • Providing missing thiamine for people who don't get enough vitamin B in their diet — usually not eating enough bread cereal or grains
<p>How it works</p>	<ul style="list-style-type: none"> • Replaces lost or missing thiamine • Thiamine is needed for <ul style="list-style-type: none"> ◦ Nervous system to work properly ◦ Body to use carbohydrates for energy
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually no problems • Allergic reactions can occur after an injection (rare)



 <p>Warnings</p>	
 <p>Tell the patient</p>	 <p>Healthy food</p>
<p>Check</p>	<ul style="list-style-type: none">• People who are long-term or regular heavy drinkers of alcohol, or not eating properly, may need thiamine injection at first, before starting tablets








<p>Active ingredients (generic names)</p>	<p>ACICLOVIR (a-sy-clo-veer) Common brands include: <i>Acihexal, Lovir, Zovirax</i></p> <p>FAMCICLOVIR (fam-sy-clo-veer) Common brands include: <i>Famvir</i></p> <p>VALACICLOVIR (vala-sy-clo-veer) Common brands include: <i>Valtrex</i></p>  <p>Common name: antivirals</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Infections caused by viruses <ul style="list-style-type: none"> ◦ Chickenpox (<i>CARPA STM p333</i>) ◦ Cold sores (aciclovir ointment) (<i>CARPA STM p390</i>) ◦ Genital herpes (valaciclovir, famciclovir) (<i>CARPA STM p289, WBM p257</i>) ◦ Genital herpes in pregnancy (aciclovir) (<i>WBM p258</i>) ◦ Shingles (<i>CARPA STM p334</i>) ◦ Viral eye infections <p>Doses: Aciclovir — <i>CARPA STM p423, WBM p363</i> Famciclovir — <i>CARPA STM p431, WBM p371</i> Valaciclovir — <i>CARPA STM p437, WBM p377</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Stops viruses from growing by disrupting their DNA
<p>Side effects</p>	 <p>Nausea and vomiting Diarrhoea Headache Confusion – with higher doses</p>





 <p>Warnings</p>	<p>If breastfeeding — aciclovir or valaciclovir preferred to famciclovir</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult ACICLOVIR, FAMCICLOVIR, or VALACICLOVIR with:</p> <ul style="list-style-type: none"> • Mycophenolate
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • For herpes and shingles — medicine works best if taken as soon as rash appears (within first 3 days) • For prevention of herpes — take medicine every day to stop symptoms coming back • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take with large glass of water</p> </div> <div style="text-align: center;">  <p>Drink lots of water – reduces strain on kidneys</p> </div> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Follow-up when treatment finished to make sure infection is gone. If not — medical consult









<p>Active ingredients (generic names)</p>	<p>ALBENDAZOLE (al-ben-da-zole) Common brands include: <i>Eskazole, Zentel</i></p>  <p>Other benzimidazoles Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Mebendazole
<p>What it is used for</p>	<ul style="list-style-type: none"> • Hookworms (<i>CARPA STM p418</i>) <ul style="list-style-type: none"> ◦ Anaemia in children (<i>CARPA STM p118</i>) ◦ Anaemia in adults (<i>CARPA STM p304</i>) ◦ Community de-worming (<i>CARPA STM p419</i>) • Threadworms (<i>CARPA STM p418</i>) • Strongyloides (<i>CARPA STM p418</i>) <ul style="list-style-type: none"> ◦ Growth faltering (<i>CARPA STM p161</i>) • Whipworms (<i>CARPA STM p418</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Stops worms from growing 
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually none with short treatment <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> </div>







 <p>Warnings</p>	 <p>Pregnant</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May need to be treated again after 1 week • Keep fingernails short if scratching <div style="display: flex; justify-content: space-around;"> <div>  <p>Take on empty stomach (hookworm, threadworm, whipworm)</p> </div> <div>  <p>Take with food or milk (strongyloides)</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div>  <p>Wash hands</p> </div> <div>  <p>Treat everyone living in house</p> </div> </div>
<p>Check</p>	 <p>Blood test</p> <p>If using for more than 6 weeks – liver function tests (LFT), FBC</p>















<p>Active ingredients (generic names)</p>	<p>AZITHROMYCIN (a-zith-row-my-sin) Common brands include: <i>Zedd, Zithromax, Zitrocin</i></p> <p>ROXITHROMYCIN (rox-ith-row-my-sin) Common brands include: <i>Biaxsig, Roxar, Rulide</i></p>  <p>Other macrolides Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Clarithromycin • Erythromycin
<p>What it is used for</p>	<p>Azithromycin</p> <ul style="list-style-type: none"> • Chronic suppurative lung disease (CSLD) in children — acute episode (exacerbation) (<i>CARPA STM p133</i>) • Chlamydia and gonorrhoea — <i>CARPA STM (p278)</i>, <i>WBM (p245)</i> <ul style="list-style-type: none"> ◦ Abnormal vaginal discharge (<i>WBM p254</i>) ◦ Discharge from penis (<i>CARPA STM p286</i>) ◦ Painful scrotum (<i>CARPA STM p384</i>) ◦ Pelvic inflammatory disease (<i>WBM p262</i>) • Donovanosis — <i>CARPA STM (p280)</i>, <i>WBM (p247)</i> • Sore throat (<i>CARPA STM p407</i>) • Trachoma (<i>CARPA STM p351</i>) • Uterus infection (endometritis) (<i>WBM p217</i>) • Vaginal abscess (<i>WBM p306</i>) <p>Roxithromycin (if allergic to penicillin)</p> <ul style="list-style-type: none"> • Mild or moderate pneumonia (<i>CARPA STM p311</i>) • Sinusitis (<i>CARPA STM p312</i>) <p>Doses: Azithromycin — <i>CARPA STM p426</i>, <i>WBM p366</i>, Roxithromycin — <i>CARPA STM p436</i>, <i>WBM p376</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria cell from making proteins, so it can't grow • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	 <p>Nausea and vomiting Diarrhoea Abdominal pain Headache</p>


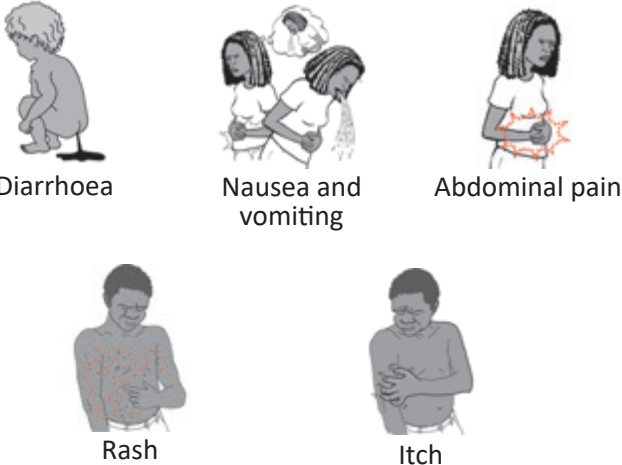
 <p>Warnings</p>	<ul style="list-style-type: none"> • Ask about allergies <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Babies under 6 months (limited information)</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>AZITHROMYCIN with:</p> <ul style="list-style-type: none"> • Digoxin • Statins • Theophylline • Warfarin </div> <div style="width: 45%;"> <p>ROXITHROMYCIN with:</p> <ul style="list-style-type: none"> • Digoxin • Warfarin </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> <div style="text-align: center;">  <p>Take on empty stomach (roxithromycin)</p> </div> </div> <p>Warning stickers (p298): Azithromycin medicine mixture 7a Roxithromycin 3b</p>
<p>Check</p>	<ul style="list-style-type: none"> • Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">  <p>Making mixture (azithromycin)</p> </div> <div> <p>Make sure right amount of clean water added to dry powder</p> </div> </div>







<p>Active ingredients (generic names)</p>	<p>CEFACTOR (kef-a-claw) Common brands include: <i>Ceclor, Cefactor, Keflor</i></p> <p>CEFALEXIN (sef-a-lex-in) Common brands include: <i>Keflex, Ibilex, Rancef</i></p> <p>CEFAZOLIN (ce-faz-o-lin) Common brands include: <i>Cefazolin</i></p> <p>CEFTRIAXONE (sef-tri-ax-own) Common brands include: <i>Rocephin</i></p> <p>Other cephalosporins Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Cefalotin • Cefepime • Cefotaxime • Cefoxitin • Ceftaroline • Ceftazidime • Cefuroxime
<p>What it is used for</p>	<ul style="list-style-type: none"> • Lots of infections — gonorrhoea, kidney infections, mastitis, melioidosis, meningitis, pneumonia, septicaemia, skin and soft tissue infections, urinary tract infection (UTIs) • Chronic suppurative lung disease (CSLD) in children — if acute episode (cefactor) (CARPA STM p133) <p>Doses: Cefactor — CARPA STM p427, WBM p367 Cefalexin — CARPA STM p427, WBM p367 Cefazolin — CARPA STM p428, WBM p368 Ceftriaxone — CARPA STM p428, WBM p368</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria's cell wall from growing • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<ul style="list-style-type: none"> • Serum sickness-like reaction — rash, swollen glands, sore joints • Anaphylaxis rare — but consider if trouble breathing <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Diarrhoea</p> </div> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Rash</p> </div> <div style="text-align: center;">  <p>Anaphylaxis severe allergic reaction</p> </div> </div>




 <p>Warnings</p>	<ul style="list-style-type: none"> • Ask about allergies <ul style="list-style-type: none"> ◦ Person who is allergic to penicillin may also be allergic to cephalosporins  <p>Kidney trouble</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back • If mixture not kept in fridge — use-by/expiry date will be sooner and it won't work as well <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Take with food or milk (cefador tablets)</p> </div> <div style="text-align: center;">  <p>Store medicine mixture in fridge (not freezer)</p> </div> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic straight away if you get rash, swollen glands, sore joints (serum sickness-like reaction)</p> </div> <p>Warning stickers (p298): Cefador A, B Medicine mixture (cefador, cefalexin) 6, 7a</p>
<p>Check</p>	<ul style="list-style-type: none"> • Always have anaphylaxis kit with adrenaline (epinephrine) ready when giving ceftriaxone or cefazolin injections (CARPA STM p32) • Follow-up when antibiotic finished to make sure infection is gone. If not — medical consult <div style="display: flex; align-items: center; margin-top: 20px;">  <div style="margin-left: 10px;"> <p>Make sure right amount of clean water added to dry powder</p> </div> </div> <p>Making mixture</p>










<p>Active ingredients (generic names)</p>	<p>CIPROFLOXACIN (sip-row-flox-a-sin) Common brands include: <i>C-Flox, Ciprol, Ciproxin</i></p>  <p>Other quinolones Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Moxifloxacin • Norfloxacin
<p>What it is used for</p>	<ul style="list-style-type: none"> • Bronchiectasis in adults — acute episode because of <i>Pseudomonas</i> infection (<i>CARPA STM p317</i>) • Soft tissue injuries (<i>CARPA STM p84</i>) • Water-related skin infections (<i>CARPA STM p392</i>) • Serious infections — sepsis <p>Doses — <i>CARPA STM p430, WBM p370</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria from making DNA. DNA is important for bacteria's growth • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<ul style="list-style-type: none"> • Skin more sensitive to the sun • Tendon damage (rare)  <p>Abdominal pain</p>  <p>Nausea and Vomiting</p>  <p>Diarrhoea</p>  <p>Rash</p>  <p>Dizzy</p>


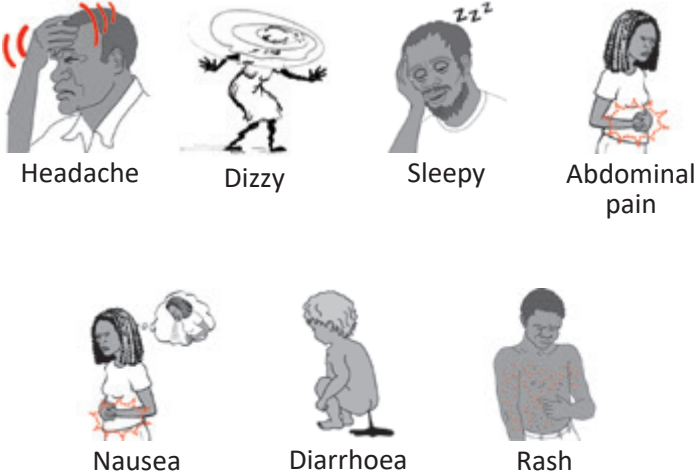
 <p>Warnings</p>	<ul style="list-style-type: none"> • Caution in people who are taking or have just finished taking corticosteroid <div style="display: flex; justify-content: space-around; text-align: center;"> <div>  <p>Pregnant</p> </div> <div>  <p>Breastfeeding</p> </div> <div>  <p>Children</p> </div> </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 10px;"> <div>  <p>Liver trouble</p> </div> <div>  <p>Kidney trouble</p> </div> <div>  <p>People who have fits</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Quinolones interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Stop taking these tablets if you get sore tendons or joints • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 10px;"> <div>  <p>Take on empty stomach</p> </div> <div>  <p>Drink lots of water</p> </div> <div>  <p>Keep out of the sun</p> </div> </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 10px;"> <div>  <p>Do not drive or operate machinery if dizzy or faint</p> </div> <div>  <p>Do not drink alcohol (grog)</p> </div> <div>  <p>Finish medicine — even if you feel better</p> </div> </div>
	<p>Warning stickers (p298): 3b, 4a, 8, 12</p>
<p>Check</p>	<ul style="list-style-type: none"> • Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult










<p>Active ingredients (generic names)</p>	<p>CLINDAMYCIN (clin-da-my-sin) Common brands include: <i>Cleocin, Dalacin C</i></p>  <p>Other lincosamides Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Lincomycin
<p>What it is used for</p>	<ul style="list-style-type: none"> • Endocarditis prevention (prophylaxis) (<i>CARPA STM p298</i>) • Gum and tooth infections (<i>CARPA STM p340</i>) • Cellulitis (<i>CARPA STM p389</i>) • Soft tissue injuries (<i>CARPA STM p82</i>) <p>Doses — <i>CARPA STM p430, WBM p370</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops the bacteria cell from making proteins so it can't grow • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	 <p>Diarrhoea Nausea and vomiting Abdominal pain</p> <p>Rash Itch</p>





 <p>Warnings</p>	<p>Interactions — Do not use together without medical consult</p> <p>CLINDAMYCIN with:</p> <ul style="list-style-type: none"> Some medicines used when intubating patients
 <p>Tell the patient</p>	<ul style="list-style-type: none"> Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> <div style="text-align: center;">  <p>Take with large glass of water</p> </div> <div style="text-align: center;">  <p>Return to clinic if you get diarrhoea – stop taking medicine</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult <div style="text-align: center;">  <p>Blood test</p> </div> <p>If using for a long time – check kidney function (UEC), liver function (LFT), FBC</p>









<p>Active ingredients (generic names)</p>	<p>DOXYCYCLINE (dox-i-si-cleen) Common brands include: <i>Doxsig, Doxy, Doxylin</i></p>  <p>Other tetracyclines Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Minocycline • Tetracycline
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chronic lung disease — getting worse (exacerbation) <ul style="list-style-type: none"> ◦ Bronchiectasis in adults (<i>CARPA STM p317</i>) ◦ COPD (<i>CARPA STM p320</i>) • Water-related skin infections (<i>CARPA STM p392</i>) • Infected testes (<i>CARPA STM p384</i>) • Pelvic inflammatory disease (PID) (<i>WBM p262</i>) • Acne (pimples) • Malaria prevention (prophylaxis) • Leptospirosis (Weil's/canecutter's disease) <p>Doses — <i>CARPA STM p431, WBM p371</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria cell from making proteins so it can't grow • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<ul style="list-style-type: none"> • Heartburn • Discoloured teeth (long-term use) • Increased skin sensitivity to the sun <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center;">  <p>Diarrhoea</p> </div> </div>







 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Children under 8 years</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Tetracyclines interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> Stay standing or sitting for at least one hour after taking. If the tablets stick in your throat, they can cause damage Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take with food or milk</p> </div> <div style="text-align: center;">  <p>Take with large glass of water</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Keep out of the sun</p> </div> <div style="text-align: center;">  <p>Finish medicine — even if you feel better</p> </div> </div> <p>Warning stickers (p298): 4b, 8, B</p>
<p>Check</p>	<ul style="list-style-type: none"> Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult





<p>Active ingredients (generic names)</p>	<p>FLUCONAZOLE (flu-koe-na-zol) Common brands include: <i>Diflucan, Fluzole, Ozole</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Thrush (candida infection) that isn't getting better (<i>WBM p255</i>) • Fungal infections, prevention and treatment
<p>How it works</p>	<ul style="list-style-type: none"> • Interferes with cell structure of fungus so it can't grow
<p>Side effects</p>	 <p>Headache Dizzy Sleepy Abdominal pain</p> <p>Nausea Diarrhoea Rash</p>



 <p>Warnings</p>	 <p>Pregnant</p>  <p>Kidney trouble</p> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Fluconazole interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> Take all the medicine — makes sure all the germs are gone and the infection doesn't come back  <p>Take with large glass of water</p>  <p>Finish medicine — even if you feel better</p>  <p>Return to clinic straight away if unusually tired, nauseous or not eating OR dark urine, pale faeces, yellowing of skin or the whites of the eyes</p> <p>Warning stickers (p298): 5</p>
<p>Check</p>	<ul style="list-style-type: none"> Follow-up when treatment finished to make sure infection is gone. If not — medical consult  <p>Make sure right amount of clean water added to dry powder</p> <p>Making mixture</p>  <p>If using for a long time — liver function tests (LFT), potassium level before starting, then every 1–3 months</p> <p>Blood test</p>










<p>Active ingredients (generic names)</p>	<p>GENTAMICIN (gen-ta-my-sin)</p>  <p>Other aminoglycosides Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Amikacin • Tobramycin
<p>What it is used for</p>	<ul style="list-style-type: none"> • Single dose given to people with serious infection before being sent to hospital • Serious infections (in hospital) <p>Doses — <i>CARPA STM p433</i>, <i>WBM p373</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria cell from making proteins so it can't grow • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<ul style="list-style-type: none"> • Can affect balance  <p>Kidney trouble – if used for more than 1 week</p>  <p>Ear damage – if used for more than 1 week</p>  <p> ringing in ears</p>



 <p>Warnings</p>	 <p>Pregnant</p>  <p>Old people</p>  <p>Hearing trouble</p>  <p>Kidney trouble</p>
 <p>Tell the patient</p>	 <p>Return to clinic if your hearing gets worse <i>OR</i> you are unsteady or dizzy</p>
<p>Check</p>	 <p>Blood test</p> <p>Check kidney function (UEC) before starting medicine If used for longer time – monitor blood levels</p>





<p>Active ingredients (generic names)</p>	<p>IVERMECTIN (i-ver-mec-tin) Common brands include: <i>Stromectol</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Crusted scabies (<i>CARPA STM p396</i>) • Scabies (resistant) (<i>CARPA STM p395</i>) • Strongyloides (<i>CARPA STM p418</i>) <p>Doses — <i>CARPA STM p434, WBM p374</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Kills worms and mites that infect people 
<p>Side effects</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;">  <p>Diarrhoea</p> </div> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Sleepy</p> </div> <div style="text-align: center;">  <p>Itch</p> </div> </div>






 <p>Warnings</p>	 <p>Pregnant</p>  <p>Children under 5 years or less than 15kg</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • For crusted scabies <ul style="list-style-type: none"> ◦ Use skin cream like <i>Lyclear</i> at same time ◦ Treat other family members for scabies to prevent reinfection • May need to treat again after 1–2 weeks • How to prevent scabies and/or strongyloides infections
<p>Check</p>	














<p>Active ingredients (generic names)</p>	<p>METRONIDAZOLE (me-tro-ni-da-zole) Common brands include: <i>Flagyl, Metrogyl, Metronide</i></p> <p>TINIDAZOLE (ti-ni-da-zole) Common brands include: <i>Fasigyn, Simplotan</i></p> 
<p>What it is used for</p>	<p>Metronidazole and tinidazole</p> <ul style="list-style-type: none"> • <i>Giardia</i> — growth faltering (<i>CARPA STM p161</i>), persistent diarrhoea (<i>CARPA STM p171</i>) • <i>Trichomonas</i> — <i>CARPA STM p282, WBM p249</i>, abnormal vaginal discharge (<i>WBM p253</i>) <p>Metronidazole</p> <ul style="list-style-type: none"> • Bacterial vaginosis (<i>WBM p255</i>) • Broken jaw (<i>CARPA STM p342</i>) • Dental infections (<i>CARPA STM p335</i>) • Diabetic foot infection (<i>CARPA STM p262</i>) • Gall bladder disease (<i>CARPA STM p22</i>) • Intrauterine infection (chorioamnionitis) (<i>WBM p31</i>) • Pelvic inflammatory disease (PID) (<i>WBM p262</i>) • Preventing infection — uterine inversion (<i>WBM p67</i>), secondary postpartum haemorrhage (<i>WBM p214</i>) • Soft tissue injuries (<i>CARPA STM p84</i>) • Uterus infection (endometritis) (<i>WBM p215</i>) <p>Doses: Metronidazole — <i>CARPA STM p434, WBM p374</i> Tinidazole — <i>CARPA STM p437, WBM p377</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • An antibiotic that stops bacteria from making DNA. DNA is important for the bacteria's growth • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<ul style="list-style-type: none"> • Metallic taste in mouth • Vaginal thrush (candida infection)  <p>Nausea and vomiting Abdominal pain Diarrhoea Dizzy</p>


 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant (tinidazole)</p> </div> <div style="text-align: center;">  <p>Breastfeeding (tinidazole)</p> </div> <div style="text-align: center;">  <p>Liver trouble (metronidazole)</p> </div> </div>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <p>METRONIDAZOLE with</p> <ul style="list-style-type: none"> • Alcohol • Mycophenolate • Phenytoin • Warfarin <p>TINIDAZOLE with:</p> <ul style="list-style-type: none"> • Alcohol • Warfarin <ul style="list-style-type: none"> • If you get a metallic taste in your mouth that bothers you, suck on some lollies (if you don't have diabetes) • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take with food or milk</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog) during treatment or for 3 days after – will make you feel sick</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if dizzy or faint</p> </div> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> </div> <p>Warning stickers (p298): Metronidazole tablets 2, 5, B Metronidazole medicine mixture 2, 5, C Tinidazole 2, B</p>
<p>Check</p>	<ul style="list-style-type: none"> • Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult





<p>Active ingredients (generic names)</p>	<p>MICONAZOLE (my-con-a-zole) Common brands include: <i>Daktarin, Resolve</i></p>  <p>Other azole topical antifungals Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Bifonazole • Ciclopirox • Clotrimazole • Econazole • Ketoconazole <p>Topical azole & anti-inflammatory combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Clotrimazole + hydrocortisone (eg <i>Hydrozole Cream</i>) • Miconazole + hydrocortisone (eg <i>Resolve Plus</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Fungal infections of skin <ul style="list-style-type: none"> ◦ Nipple (<i>WBM p204</i>) and baby's mouth when breastfeeding ◦ Nappy rash (<i>CARPA STM p406</i>) ◦ Tinea (ringworm, jock itch, athlete's foot) (<i>CARPA STM p400</i>) • Fungal infections of vagina (thrush) (<i>WBM p255</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Stops fungus growing 
<p>Side effects</p>	<ul style="list-style-type: none"> • Can cause stinging if skin very tender from infection or from scratching






 <p>Warnings</p>	<ul style="list-style-type: none"> • Some combination antifungals can make a rash worse • May need antifungal tablets  <p>Medical consult if needed for more than a short time <i>OR</i> if lots of fungal infections – may be other problems</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Use vaginal treatments at bedtime • Use a soothing cream or ice to relieve itch between antifungal cream applications • Can take a few weeks to treat skin infections • Keep using antifungal cream for 2 weeks after all signs of infection gone to stop it coming back  <p>Don't scratch – even if itchy</p>
<p>Check</p>	<p>Warning stickers (p298): E</p> <ul style="list-style-type: none"> • Has patient been taking antibiotics — may cause vaginal thrush










<p>Active ingredients (generic names)</p>	<p>NITROFURANTOIN (ni-tro-fue-ran-toyn) Common brands include: <i>Macrochantin</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Urinary tract infections • Urinary tract infections in pregnancy (WBM p150)
<p>How it works</p>	<ul style="list-style-type: none"> • An antibiotic that slows bacterial protein and cell wall growth • Helps to kill bacteria that cause some urinary tract infections • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center; margin: 10px;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center; margin: 10px;">  <p>Diarrhoea</p> </div> <div style="text-align: center; margin: 10px;">  <p>Dizzy</p> </div> <div style="text-align: center; margin: 10px;">  <p>Rash</p> </div> </div>







 <p>Warnings</p>	 <p>Pregnant late term</p>  <p>Breastfeeding if baby less than 4 weeks old</p>  <p>Medical consult if person keeps getting UTIs</p>  <p>Old people</p>  <p>Kidney trouble</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult NITROFURANTOIN with Urinary alkalinisers</p> <ul style="list-style-type: none"> • Urine may turn a brownish colour • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back  <p>Take with large glass of water</p>  <p>Take with food or milk</p>  <p>Do not drive or operate machinery if sleepy or dizzy</p>  <p>Return to clinic straight away if you have trouble breathing, develop a cough, or get tingling or numbness</p>  <p>Finish medicine — even if you feel better</p>
<p>Check</p>	<p>Warning stickers (p298): 12, B</p> <ul style="list-style-type: none"> • Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult  <p>Blood test</p> <p>If using for a long time — kidney function (UEC), liver function tests (LFT)</p>










<p>Active ingredients (generic names)</p>	<p>NYSTATIN (ny-stat-in) Common brands include: <i>Mycostatin, Nilstat</i></p>  <p>Other oral antifungals Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Miconazole (gel) (p64)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Fungal infections — thrush in mouth of babies or adults
<p>How it works</p>	<ul style="list-style-type: none"> • Acts on fungus in the mouth to stop it growing
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually no side effects




 <p>Warnings</p>	<ul style="list-style-type: none"> • If mother breastfeeding — may need to treat mother's nipple area as well as baby's mouth  <p>Medical consult if needed for more than a short time <i>OR</i> if lots of fungal infections – may be other problems</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not eat or drink for at least an hour after applying medicine • Keep using drops for 2 days after infection has cleared up • Keep using gel for a week after infection has cleared up  <p>Return to clinic if needed for more than a short time</p>
<p>Check</p>	<p>Warning stickers (p298): Skin E</p>






<p>Active ingredients (generic names)</p>	<p>AMOXICILLIN (am-ox-i-sil-in) Common brands include: <i>Amoxil, Cilamox, Alphamox</i></p> <p>AMPICILLIN (am-pi-sil-in) Common brands include: <i>Ampicyn, Austrapen, Ibimicyn</i></p> <p>BENZATHINE PENICILLIN (benz-a-thine pen-i-sil-in) Also known as penicillin G Common brands include: <i>Bicillin LA, Pan Benzathine</i></p> <p>BENZYL PENICILLIN (benz-el-pen-i-sil-in) Common brands include: <i>BenPen, Pen G, Penicillin G</i></p> <p>DICLOXACILLIN (di-clox-a-sil-in) Common brands include: <i>Diclocil, Dicloxig</i></p> <p>FLUCLOXACILLIN (flu-clox-a-sil-in) Common brands include: <i>Flopen, Flubiclox, Staphylex</i></p> <p>PHENOXYMETHYLPENICILLIN (fen-oxi-methal-pen-i-sil-in) Common brands include: <i>Abbecillin, Cilicaine, Cilopen</i></p> <p>PROCAINE BENZYL PENICILLIN (procaine penicillin) (pro-cane benz-el-pen-i-sil-in) Common brands include: <i>Cilicaine</i></p> <p>AMOXICILLIN + CLAVULANIC ACID (am-ox-i-sil-in klav-u-lan-ic a-sid) Common brands include: <i>Augmentin, Clamoxyl</i></p> <div style="text-align: center;">  </div> <p>Other penicillin combinations Not included in this monograph — see <i>AMH</i> for information: • Piperacillin + tazobactam (eg <i>PiperTaz, Piptaz, Tazocin EF</i>)</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Different types of bacterial infections <p>Doses: Antibiotics doses table — CARPA STM p423, WBM p363</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Kills bacteria sensitive to penicillin — stops cell wall growing • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Diarrhoea</p> </div> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Rash</p> </div> <div style="text-align: center;">  <p>Anaphylaxis severe allergic reaction</p> </div> </div>





 <p>Warnings</p>	<ul style="list-style-type: none"> • About 1 in 10 people are allergic to penicillin <ul style="list-style-type: none"> ◦ Consider allergy if rash • Anaphylaxis is rare — but consider if trouble breathing <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Rash</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Rheumatic fever needs regular long-term treatment with benzathine penicillin to prevent heart damage or stop it getting worse. Doctor will tell you when you can stop • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take on empty stomach (dicloxacillin, flucloxacillin, phenoxymethylpenicillin)</p> </div> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> <div style="text-align: center;">  <p>Store children's medicine mixtures in fridge (not freezer). If any left after 2 weeks – return to clinic</p> </div> </div>
<p>Warning stickers (p298): Medicine mixtures 6, 7a Dicloxacillin, flucloxacillin, phenoxymethylpenicillin 3a or 3b Amoxicillin + clavulanic acid 13, F</p>	
<p>Check</p>	<ul style="list-style-type: none"> • Must have anaphylaxis kit (<i>CARPA STM p32</i>) with adrenaline (epinephrine) ready when giving penicillin by injection • Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Make sure right amount of clean water added to dry powder</p> <p>Making mixture</p> </div> <div style="text-align: center;">  <p>If using for more than 10 days at a high dose – kidney function (UEC), liver function tests (LFT), FBC</p> <p>Blood test</p> </div> </div>










<p>Active ingredients (generic names)</p>	<p>PROBENECID (pro-ben-a-sid) Common brands include: <i>Pro-Cid</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Helps antibiotics work better in treatment of <ul style="list-style-type: none"> ◦ Skin infections — boils, carbuncles, abscesses (<i>CARPA STM p388</i>) ◦ Gonorrhoea — <i>CARPA STM (p279)</i>, <i>WBM (p246)</i> <ul style="list-style-type: none"> ▪ Abnormal vaginal discharge (<i>WBM p254</i>) ▪ Discharge from penis (<i>CARPA STM p286</i>) • Can use for long-term treatment of gout <p>Doses — <i>CARPA STM p435</i>, <i>WBM p375</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces elimination of some acidic medicines (eg penicillins, cephalosporins) by the kidneys — so more antibiotic stays in body and works for a longer time • Increases removal of uric acid by the kidneys — reducing risk of gout attack
<p>Side effects</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center; margin: 10px;">  <p>Rash</p> </div> <div style="text-align: center; margin: 10px;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center; margin: 10px;">  <p>Headache</p> </div> <div style="text-align: center; margin: 10px;">  <p>Kidney trouble – kidney stones</p> </div> <div style="text-align: center; margin: 10px;">  <p>Dizzy</p> </div> </div>


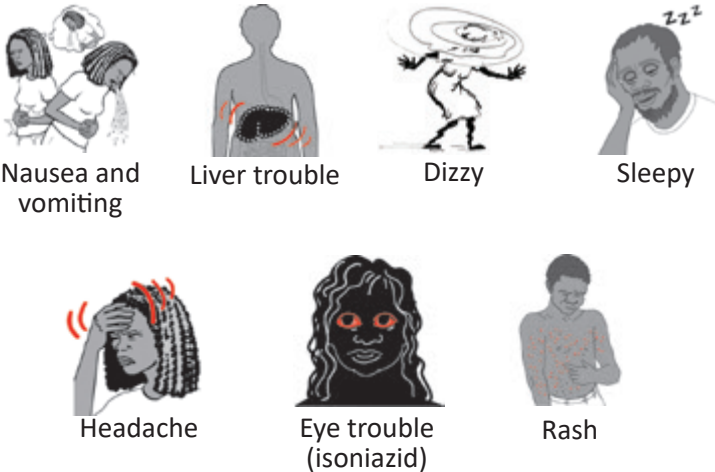
 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not start (or restart) use during a gout attack <ul style="list-style-type: none"> ◦ If person already taking regularly — can continue to use <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Kidney trouble – kidney stones</p> </div> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Children under 2 years</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Probenecid interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not take more than 1 aspirin a day unless doctor tells you to <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Take with food or milk – so medicine doesn't make you feel sick</p> </div> <div style="text-align: center;">  <p>Drink lots of water – helps stop build up of uric acid, can prevent kidney stones</p> </div> </div> <p>Warning stickers (p298): 10a, B</p>
<p>Check</p>	<div style="text-align: center;">  <p>Blood test</p> </div> <p>Regular checks for kidney function (UEC), FBC.</p>










<p>Active ingredients (generic names)</p>	<p>PYRANTEL (pie-ran-tell) Common brands include: <i>Anthel, Combantrin, Early bird chocolate squares</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Worms <ul style="list-style-type: none"> ◦ Hookworm (CARPA STM p418) ◦ Threadworm (CARPA STM p418) ◦ Community de-worming (CARPA STM p419) • Anaemia (weak blood) in pregnancy (WBM p133) <p>Doses — CARPA STM p436, WBM p376</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Kills worms that infect people 
<p>Side effects</p>	 <div style="display: flex; justify-content: space-around; text-align: center;"> <div> <p>Nausea and vomiting</p> </div> <div> <p>Diarrhoea</p> </div> <div> <p>Headache</p> </div> </div>




 <p>Warnings</p>	
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • If giving to children — use chocolate squares or crush tablets and mix with jam  <p>Treat everyone living in house</p>  <p>Wash hands</p>
<p>Check</p>	 <p>Blood test</p> <p>Check iron levels if needed</p>


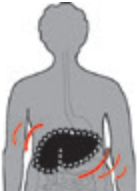





<p>Active ingredients (generic names)</p>	<p>ETHAMBUTOL (eth-am-bu-tol) Common brands include: <i>Myambutol</i></p> <p>PYRAZINAMIDE (peer-a-zin-a-mide) Common brands include: only available through special access scheme (SAS)</p>  <p>Standard short-course tuberculosis therapy — used in combination with standard long-course medicines for at least 2 months.</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Tuberculosis (TB) treatment or prevention (<i>CARPA STM p408</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Kills or slows growth of bacteria that cause TB
<p>Side effects</p>	<ul style="list-style-type: none"> • Sore joints (pyrazinamide) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center;">  <p>Eye trouble (ethambutol)</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Rash (ethambutol)</p> </div>



 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Liver trouble (pyrazinamide)</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> <div style="text-align: center;">  <p>Eye trouble (ethambutol)</p> </div> <div style="text-align: center;">  <p>Gout</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • TB medicines interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May take 6 months for infection to go away <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Important to take medicine as directed</p> </div> <div style="text-align: center;">  <p>Return to clinic straight away if changes in vision (blurred or colour changes), ongoing nausea, vomiting, unusual tiredness, yellowing of eyes, dark urine, pale faeces</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Patient must be supervised by Centre for Disease Control (CDC) or Public Health Unit (PHU) • Check vision before starting treatment and every month while using ethambutol <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Blood test</p> </div> <div> <p>Check kidney function (UEC), potassium level, rheumatoid factor (RF) 1–2 weeks after starting medicine, then every 6–12 months</p> </div> </div>














<p>Active ingredients (generic names)</p>	<p>ISONIAZID (iso-ni-a-zid) Common brands include: <i>Isoniazid</i></p> <p>RIFAMPICIN (rif-amp-i-cin) Common brands include: <i>Rifadin, Rimycin</i></p>  <p>Standard long-course TB therapy — used with short-course TB medicines for at least 2 months, then just these 2 long-course medicines for at least 6 months.</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Tuberculosis (TB) treatment or prevention (CARPA STM p408)
<p>How it works</p>	<ul style="list-style-type: none"> • Kills or slows growth of bacteria that cause TB
<p>Side effects</p>	<ul style="list-style-type: none"> • Red coloured urine and body secretions (eg sweat, tears) (rifampicin) • Flu-like symptoms — sore bones/muscles • Nerve (neuropathic) pain in legs and arms (isoniazid) <ul style="list-style-type: none"> ◦ Taking vitamin B6 (pyridoxine) at same time reduces risk  <p>Nausea and vomiting Liver trouble Dizzy Sleepy</p> <p>Headache Eye trouble (isoniazid) Rash</p>





 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Kidney trouble (isoniazid)</p> </div> <div style="text-align: center;">  <p>People who have fits (isoniazid)</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • TB medicines interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Take vitamin B6 (pyridoxine) with isoniazid to reduce risk of nerve pain in legs and arms • Take medicine regularly so you don't get flu-like symptoms • May take 6 months for infection to go away • Red urine and body secretions aren't dangerous and will stop when medicine is finished <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Take on empty stomach</p> </div> <div style="text-align: center;">  <p>Important to take medicine as directed</p> </div> <div style="text-align: center;">  <p>Return to clinic straight away if nausea, vomiting, tiredness, changes in vision, fever, or rash gets worse or bothers you. Stop taking the medicine</p> </div> </div>
	<p>Warning stickers (p298): Isoniazid 3b Rifampicin 3b, 5</p>
<p>Check</p>	<ul style="list-style-type: none"> • Patient must be supervised by Centre for Disease Control (CDC) or Public Health Unit (PHU) • Is person taking vitamin B6 (pyridoxine) with isoniazid <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>Check liver function tests (LFT), creatinine, FBC, thyroid function (rifampicin), before starting medicine, then LFT every 1–3 months</p> </div> </div> <p>Blood test</p>








<p>Active ingredients (generic names)</p>	<p>TERBINAFINE (ter-bin-na-feen) Common brands include: Oral: <i>Lamisil, Sebifin, Tamsil</i> Topical: <i>Lamisil, SolvEasy Tinea, Tamsil</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Serious or long lasting fungal infections of skin or nails <ul style="list-style-type: none"> ◦ Tinea (<i>CARPA STM p400</i>) <p>Doses — <i>CARPA STM p400</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Travels through blood and into skin and nails to kill fungus that causes infection • Needs to be taken for a long time • Different germs need different anti-infectives. If not sure which one to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i> 
<p>Side effects</p>	<ul style="list-style-type: none"> • Strange taste in mouth  <p>Headache Nausea Diarrhoea</p>





 <p>Warnings</p>	<ul style="list-style-type: none"> • Psoriasis (thick, red, scaly skin) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <p>TERBINAFINE with:</p> <ul style="list-style-type: none"> • Rifampicin
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Nails will not look normal until they grow out • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> <div style="text-align: center;">  <p>Return to clinic straight away if unusually tired, nauseous or not eating <i>OR</i> dark urine, pale faeces, yellowing of skin or the whites of the eyes</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Precautions with terbinafine (<i>CARPA STM p401</i>) • Follow-up when treatment finished to make sure infection has gone. If not — medical consult <div style="text-align: center;">  <p>If using for more than 6 weeks – liver function tests (LFT), FBC</p> <p>Blood test</p> </div>









<p>Active ingredients (generic names)</p>	<p>TRIMETHOPRIM (tri-meth-o-prim) Common brands include: <i>Alprim, Triprim</i></p> <p>TRIMETHOPRIM + SULFAMETHOXAZOLE (tri-meth-o-prim + sul-fa-meth-ox-a-zol) Also known as: co-trimoxazole Common brands include: <i>Bactrim, Resprim, Septrin</i></p> 
<p>What it is used for</p>	<p>Trimethoprim</p> <ul style="list-style-type: none"> • Respiratory infections • Urinary tract infections (UTIs) <ul style="list-style-type: none"> ◦ Female (non-pregnant) (CARPA STM p413) ◦ Male (CARPA STM p412) ◦ Painful scrotum (CARPA STM p385) • Mild kidney infection (CARPA STM p414) <p>Trimethoprim + sulfamethoxazole</p> <ul style="list-style-type: none"> • Acute otitis media (CARPA STM p178) • Balanitis (CARPA STM p189) • Melioidosis (CARPA STM p375) • Skin infections <ul style="list-style-type: none"> ◦ Boils (CARPA STM p388) ◦ School sores (impetigo)(CARPA STM p387) • Urinary tract infections (UTI) in children (CARPA STM p186) <p>Doses: Trimethoprim + sulfamethoxazole — CARPA STM p437, WBM p377</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria from making folate, which is important for bacteria's growth • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, CARPA STM or WBM
<p>Side effects</p>	 <p>Nausea and vomiting Itchy rash Fever</p>







 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Baby under 1 month</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Kidney trouble</p> </div> <div style="text-align: center;">  <p>Liver trouble – severe</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <p>TRIMETHOPRIM with:</p> <ul style="list-style-type: none"> • Methotrexate • Phenytoin <p>TRIMETHOPRIM + SULFAMETHOXAZOLE with:</p> <ul style="list-style-type: none"> • Methotrexate • Phenytoin • Warfarin
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Take all the medicine — makes sure all the germs are gone and the infection doesn't come back <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Take at night (trimethoprim)</p> </div> <div style="text-align: center;">  <p>Drink lots of water</p> </div> <div style="text-align: center;">  <p>Keep out of the sun (trimethoprim + sulfamethoxazole)</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Take with food or milk (trimethoprim + sulfamethoxazole)</p> </div> <div style="text-align: center;">  <p>Finish medicine – even if you feel better</p> </div> </div> <p>Warning stickers (p298): Trimethoprim + sulfamethoxazole 8, B</p>
<p>Check</p>	<ul style="list-style-type: none"> • Follow-up when antibiotic treatment finished to make sure infection is gone. If not — medical consult <div style="display: flex; align-items: center; margin-top: 20px;">  <div style="margin-left: 10px;"> <p>If taking trimethoprim + sulfamethoxazole for a long time – FBC, kidney function (UEC), liver function tests (LFT), folate levels regularly</p> </div> </div> <p>Blood test</p>













<p>Active ingredients (generic names)</p>	<p>VANCOMYCIN (van-co-my-sin) Common brands include: <i>Vancocin</i></p>  <p>Other glycopeptides Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Teicoplanin
<p>What it is used for</p>	<ul style="list-style-type: none"> • Prevention of endocarditis during dental and surgical procedures for people with heart problems, if allergic to penicillin <ul style="list-style-type: none"> ◦ Rheumatic heart disease (<i>CARPA STM p298</i>) ◦ Rheumatic heart disease in pregnancy (<i>WBM p137</i>) • Serious infections in people allergic to penicillin or cephalosporins • Serious infections resistant to other antibiotics — see MRSA in Glossary (<i>p305</i>) <p>Doses — <i>CARPA STM p438, WBM p378</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria cell from making proteins, so it can't grow • Different germs need different antibiotics. If not sure which antibiotic to use — check with doctor, <i>CARPA STM</i> or <i>WBM</i>
<p>Side effects</p>	<ul style="list-style-type: none"> • Flushing, rash, itch, swelling of throat (red man syndrome) — rare <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Itch</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> <div style="text-align: center;">  <p>Hearing trouble</p> </div> </div>





 <p>Warnings</p>	<ul style="list-style-type: none"> Give infusion over at least 1 hour to reduce risk of red man syndrome <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Hearing trouble</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult VANCOMYCIN with:</p> <ul style="list-style-type: none"> Any medicine that affects the kidneys or ears
 <p>Tell the patient</p>	<div style="text-align: center;">  </div> <p>Return to clinic straight away if flushing, rash, itch, or swelling of the throat</p>
<p>Check</p>	<div style="text-align: center;">  <p>Blood test</p> </div> <p>Check kidney function (UEC) If used for longer time – monitor blood levels</p>














<p>Active ingredients (generic names)</p>	<p>ASPIRIN (as-pi-rin) Common brands include: <i>Astrix, Cartia, Solprin</i></p> <p>CLOPIDOGREL (clo-pid-o-grel) Common brands include: <i>Clovix, Iscover, Plavix</i></p> <p>ASPIRIN + CLOPIDOGREL (as-pi-rin + clo-pid-o-grel) Common brands include: <i>CoPlavix, Duocover, Piax Plus Aspirin</i></p>  <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>See NSAIDs for using aspirin for pain relief (p222).</p> </div> <p>Other antiplatelet medicines Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Dipyridamole • Prasugrel • Ticagrelor • Ticlopidine <p>Antiplatelet combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Aspirin + dipyridamole (eg <i>Asasantin SR</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chest pain — initial management (CARPA STM p48) • Coronary artery disease (CARPA STM p251) • Reducing cardiovascular risk (aspirin) (CARPA STM p231) • Thinning blood after heart surgery or after stent inserted (aspirin + clopidogrel)
<p>How it works</p>	<ul style="list-style-type: none"> • Prevents blood clots forming • Clots are needed to stop bleeding, but dangerous if they block blood flow to heart (heart attack), brain (stroke), lungs (pulmonary embolism) 
<p>Side effects</p>	<ul style="list-style-type: none"> • Stroke from bleeding in the brain — rare <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Bleeding – cuts may take longer to stop bleeding</p> </div> <div style="text-align: center;">  <p>Abdominal pain</p> </div> </div>


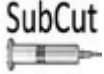


 <p>Warnings</p>	<ul style="list-style-type: none"> • People with severe bleeding disorders <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Allergic to aspirin or NSAIDs</p> </div> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Asthma</p> </div> <div style="text-align: center;">  <p>Stomach trouble – bleeding</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <p>ASPIRIN with:</p> <ul style="list-style-type: none"> • Other NSAIDs • Probenecid • Valproate • Warfarin <p>CLOPIDOGREL with:</p> <ul style="list-style-type: none"> • Proton pump inhibitors
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Keep aspirin in the foil until you need them. Soluble tablets (non-coated) go off in humid air and when wet • Use coated (non-soluble) tablets when filling dosettes • If person has stent in an artery supplying blood to their heart — they will need to take 1 or 2 antiplatelet medicines for a long time <ul style="list-style-type: none"> ◦ Important to keep taking them until doctor says it is OK to stop <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take with food or milk</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine – you may not feel different, but still important to take medicine as instructed</p> </div> </div> <p>Warning stickers (p298): Aspirin 9, 13, 19b (high dose), A, B Clopidogrel, aspirin + clopidigrel 9, 10a</p>
<p>Check</p>	








<p>Active ingredients (generic names)</p>	<p>APIXABAN (a-pix-a-ban) Common brands include: <i>Eliquis</i></p> <p>RIVAROXABAN (riv-a-rox-a-ban) Common brands include: <i>Xarelto</i></p>  <p>Common name: NOAC</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Preventing clots in people at risk <ul style="list-style-type: none"> ◦ Includes people with atrial fibrillation, after hip or knee surgery • Treatment of clots
<p>How it works</p>	<ul style="list-style-type: none"> • Prevents blood clots forming • Clots are needed to stop bleeding, but dangerous if they block blood flow to heart (heart attack), brain (stroke), lungs (pulmonary embolism) 
<p>Side effects</p>	<ul style="list-style-type: none"> • Can cause bleeding inside body <ul style="list-style-type: none"> ◦ Signs of bleeding are bruising, blood in urine, coughing up blood, red or black faeces. Can cause indigestion or upset stomach • May cause allergic reaction with swelling <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Bleeding – cuts may take longer to stop bleeding</p> </div> <div style="text-align: center;">  <p>Bleeding gums</p> </div> <div style="text-align: center;">  <p>Itchy rash (rivaroxaban)</p> </div> <div style="text-align: center;">  <p>Nausea (apixaban)</p> </div> </div>

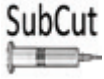

 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use if person has mechanical heart valve • If less than 60kg — check dose for apixaban <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Medical consult if signs of bleeding (eg blood in urine, red or black faeces)</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  <p>Stomach trouble</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div>
	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Abixaban and rivaroxaban interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Never take other medicines without checking. Some tablets you can buy at supermarket are dangerous to take with apixaban or rivaroxaban (eg ibuprofen) • Make sure you tell other doctors, dentists, and health people that you are taking apixaban or rivaroxaban <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  <p>Do not stop taking medicine — you may not feel different, but still important to take medicine as instructed</p> </div> <div style="text-align: center;">  <p>Return to clinic if signs of bleeding (eg nose bleeds, red or black faeces) or unexplained bruising during or after treatment</p> </div> <div style="text-align: center;">  <p>Take with food or milk (rivaroxaban)</p> </div> </div>
	<p>Warning stickers (p298): Apixaban 10b, 18 Rivaroxaban 10b, B</p>
<p>Check</p>	<ul style="list-style-type: none"> • Make sure patient knows planned length of treatment <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 10px;"> <p>Check INR (blood clotting) and kidney function UEC before starting, then UEC every 6 months (3 months if elderly or if person unwell)</p> </div> </div> <p style="margin-top: 5px;">Blood test</p>


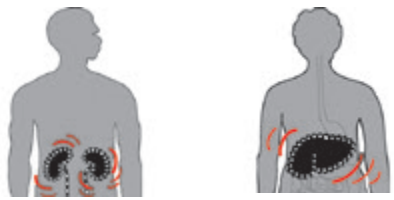


<p>Active ingredients (generic names)</p>	<p>DABIGATRAN (da-big-a-tran) Common brands include: <i>Pradaxa</i></p>  <p>Common name: NOAC</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Preventing blood clots in people at risk <ul style="list-style-type: none"> ◦ Includes people with atrial fibrillation, after hip or knee surgery
<p>How it works</p>	<ul style="list-style-type: none"> • Prevents blood clots forming • Clots needed to stop bleeding, but dangerous if they block blood flow to heart (heart attack), brain (stroke), lung (pulmonary embolism) 
<p>Side effects</p>	<ul style="list-style-type: none"> • Can cause bleeding inside the body <ul style="list-style-type: none"> ◦ Signs of bleeding are bruising, blood in urine, coughing up blood, red or black faeces. Can cause indigestion or upset stomach <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Bleeding – cuts may take longer to stop bleeding</p> </div> <div style="text-align: center;">  <p>Bleeding gums</p> </div> </div>



 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use if person has mechanical heart valve     <p>Pregnant Old people Liver trouble Medical consult if signs of bleeding (eg blood in urine, red or black faeces)</p>   <p>Stomach trouble Kidney trouble</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Swallow capsules whole. Do not open capsules or chew/ crush pellets • Do not pack into dose aids — keep capsules in foil or bottle • Never take other medicines without checking. Some tablets you can buy at supermarket are dangerous to take with dabigatran (eg ibuprofen) • Make sure you tell other doctors, dentists, and health people that you are taking dabigatran    <p>Take with food or milk</p>  <p>Take with large glass of water</p> <p>Do not stop taking medicine – you may not feel different, but still important to take medicine as instructed</p> <p>Return to clinic if signs of bleeding (eg nose bleeds, red or black faeces) or unexplained bruising during or after treatment</p>
<p>Warning stickers (p298): 10b, 13, A – bottle also 7b (30 days)</p>	
<p>Check</p>	<ul style="list-style-type: none"> • Make sure patient knows planned length of treatment  <p>Check INR (blood clotting) and kidney function UEC before starting medicine, then UEC every 6 months (3 months if elderly or if person unwell)</p> <p>Blood test</p>




<p>Active ingredients (generic names)</p>	<p>DARBEPOETIN (dar-be-po-e-tin) Common brands include: <i>Aranesp</i></p> <p> IV  SubCut</p> <p>Common name: EPO</p> <p>Other erythropoietin agonists Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Epoetin alpha • Epoetin beta • Methoxy pegepoetin beta
<p>What it is used for</p>	<ul style="list-style-type: none"> • Anaemia (lack of red blood cells) caused by kidney failure and chemotherapy
<p>How it works</p>	<ul style="list-style-type: none"> • Replaces the hormone that helps bone marrow make more red blood cells
<p>Side effects</p>	<ul style="list-style-type: none"> • Flu symptoms • Bone pain <p> High BP  Headache</p>



 <p>Warnings</p>	 <p>Breastfeeding</p>  <p>Heart trouble</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • If patient self injecting — tell them to hold syringe or preloaded injector in their hand for a few minutes to warm it — it will hurt less • If not kept in fridge — use-by/expiry date will be sooner and it won't work as well  <p>Store in fridge (not freezer)</p>
<p>Check</p>	<p>Warning stickers (p298): 6</p> <ul style="list-style-type: none"> • Before injecting, hold syringe in your hand for a few minutes to warm it — it will hurt less  <p>BP</p>  <p>Blood test</p> <p>Check Hb (haemaglobin), iron, vitamin B12, folic acid levels</p>





<p>Active ingredients (generic names)</p>	<p>ENOXAPARIN (ee-nox-ap-a-rin) Common brands include: <i>Clexane</i></p> <p>SubCut </p> <p>Other heparins Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Dalteparin • Heparin
<p>What it is used for</p>	<ul style="list-style-type: none"> • Management of heart attack <ul style="list-style-type: none"> ◦ With ST elevation (<i>CARPA STM p51</i>) ◦ Without ST elevation (<i>CARPA STM p52</i>) • Preventing and treating blood clots (thromboembolism) <ul style="list-style-type: none"> ◦ Pregnancy and postnatal (<i>WBM p139</i>) • May be used with warfarin until patient's INR (blood clotting) is in target range
<p>How it works</p>	<ul style="list-style-type: none"> • Helps to stop blood clotting, reduces risk of large clots forming
<p>Side effects</p>	<ul style="list-style-type: none"> • Bruising at injection site <p></p> <p>Bleeding or bruising</p>





 <p>Warnings</p>	 <p>Kidney trouble Liver trouble</p>
 <p>Tell the patient</p>	 <p>Return to clinic if signs of bleeding (eg nose bleeds, red or black faeces) or unexplained bruising during or after treatment</p> <p>Warning stickers (p298): 10b</p>
<p>Check</p>	<ul style="list-style-type: none"> • Patient needs to know how to give injection correctly (subcutaneously) — IM injection will cause bad bruising (haematoma)


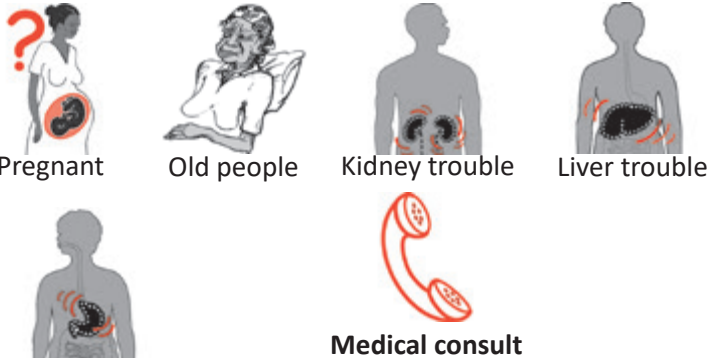





<p>Active ingredients (generic names)</p>	<p>TENECTEPLASE (ten-ec-te-plase) Common brands include: <i>Metalyse</i></p>  <p>Other thrombolytics Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Alteplase • Reteplase
<p>What it is used for</p>	<ul style="list-style-type: none"> • To treat suspected heart attack by breaking down blood clots (blockages) in the heart (thrombolysis) (<i>CARPA STM p51</i>) <p>Doses — <i>CARPA STM p50</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Causes fibrin to break down (fibrin helps clot the blood)
<p>Side effects</p>	<ul style="list-style-type: none"> • Bleeding at injection or IV site • Signs of bleeding such as bruising, blood in urine, or red or black faeces  <p>Bleeding or bruising</p>








 <p>Warnings</p>	<ul style="list-style-type: none"> • Bleeding — recent trauma or other active bleeding  <p>Pregnant</p> <p>Interactions — Do not use together without medical consult TENECTEPLASE with:</p> <ul style="list-style-type: none"> • Apixaban • Dabigatran • Rivaroxaban • Warfarin
 <p>Tell the patient</p>	
<p>Check</p>	












<p>Active ingredients (generic names)</p>	<p>VITAMIN K (vite-a-min K) Also known as: phytomenadione Common brands include: <i>Konakion</i></p>  <p>Other medicines that affect blood clotting (haemostasis) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Protamine • Tranexamic acid
<p>What it is used for</p>	<ul style="list-style-type: none"> • Prevents vitamin K deficiency bleeding (haemorrhagic disease) in newborn babies <ul style="list-style-type: none"> ◦ Baby needing special care (WBM p77) ◦ Care of the normal newborn (WBM p113) • For women using enzyme-inducing antiepileptics during pregnancy, taking vitamin K from 36 weeks pregnant helps to reduce increased risk of newborn having a bleed <ul style="list-style-type: none"> ◦ Epilepsy in pregnancy (WBM p141) • Reverses warfarin overdose — liquid for injection can be given orally. See <i>Elevated INR</i> (CARPA STM p302)
<p>How it works</p>	<ul style="list-style-type: none"> • Helps blood to clot
<p>Side effects</p>	<ul style="list-style-type: none"> • Pain from IM injection • Injection site may become tender and sore • Allergic reaction  <p>Anaphylaxis severe allergic reaction – rare</p>






 <p>Warnings</p>	<ul style="list-style-type: none"> • Best to use IM injection of vitamin K to prevent vitamin K deficiency bleeding (haemorrhagic disease) in newborn babies  <p>Old people – use lower dose</p> <p>Interactions — Do not use together without medical consult</p> <p>VITAMIN K with:</p> <ul style="list-style-type: none"> • Warfarin
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Liquid for injection can also be taken by mouth (oral)
<p>Check</p>	<ul style="list-style-type: none"> • Always have anaphylaxis kit with adrenaline (epinephrine) (<i>CARPA STM p32</i>) ready when giving vitamin K injections  <p>INR (blood clotting) INR will need to be checked more often after vitamin K given, until warfarin dose re-established. Doctor will decide how often</p> <p>Blood test</p>





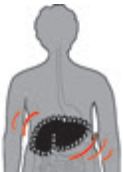






<p>Active ingredients (generic names)</p>	<p>WARFARIN (war-far-in) Common brands include: <i>Coumadin, Marevan</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Preventing clots in people at risk — people with <ul style="list-style-type: none"> ◦ Chronic heart failure (<i>CARPA STM p267</i>) ◦ Atrial fibrillation ◦ Mechanical heart valves ◦ Some clotting disorders (thrombophilias), heart diseases • Treatment of clots <ul style="list-style-type: none"> ◦ Pregnancy and postnatal (<i>WBM p139</i>) <p>Doses — <i>CARPA STM p300</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Prevents blood clots forming • Clots needed to stop bleeding, but dangerous if they block blood flow to heart (heart attack), brain (stroke), lungs (pulmonary embolism) 
<p>Side effects</p>	<ul style="list-style-type: none"> • Can cause bleeding inside body <ul style="list-style-type: none"> ◦ Signs of bleeding are bruising, blood in urine, coughing up blood, red or black faeces. Can cause indigestion or upset stomach <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Bleeding – cuts may take longer to stop bleeding</p> </div> <div style="text-align: center;">  <p>Bleeding gums</p> </div> </div>







 <p>Warnings</p>	 <p>Pregnant Old people Kidney trouble Liver trouble</p> <p>Stomach trouble</p> <p>Medical consult if signs of bleeding (eg blood in urine, red or black faeces)</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Warfarin interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine • Eat about the same amount of green leafy vegetables each week, try not to skip meals • Never take other medicines without checking. Some tablets you can buy at supermarket are dangerous when taken with warfarin (eg ibuprofen) <ul style="list-style-type: none"> ◦ Don't use aspirin and warfarin together unless doctor tells you to • The 2 brands of warfarin tablets (<i>Marevan</i> and <i>Coumadin</i>) are not exactly the same. Always take same brand of tablets • Make sure you tell other doctors, dentists, and health people that you are taking warfarin  <p>Do not drink alcohol (grog)</p>  <p>Take at same time every day</p>  <p>Return to clinic if signs of bleeding (eg nose bleeds, red or black faeces) or unexplained bruising during or after treatment</p>
<p>Check</p>	 <p>INR (blood clotting) Check before starting medicine. Doctor will decide how often to repeat</p> <p>Blood test</p>














<p>Active ingredients (generic names)</p>	<p>PERINDOPRIL (per-in-doe-pril) Common brands include: <i>Coversyl, Idaprex, Perindo</i> Note: 5mg of perindopril arginine (eg <i>Coversyl</i>) = 4mg of perindopril erbumine (eg <i>Idaprex, Perindo</i>).</p>  <p>RAMIPRIL (ram-i-pril) Common brands include: <i>Prilace, Ramace, Tritace</i></p> <p>PERINDOPRIL + INDAPAMIDE (per-in-doe-pril + in-dap-a-mide) Common brands include: <i>Coversyl Plus, Idaprex Combi, Perindo Combi</i></p> <p>Common name: ACE inhibitors</p> <p>Other ACE inhibitors Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Captopril • Lisinopril • Enalapril • Quinapril • Fosinopril • Trandolapril <p>Other ACE inhibitor & thiazide combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Enalapril + HCT (eg <i>Renitec Plus</i>) • Fosinopril + HCT (eg <i>Monoplus</i>) • Quinapril + HCT (eg <i>Accuretic</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • High BP (hypertension) (<i>CARPA STM p269</i>) • Chronic kidney disease (<i>CARPA STM p246</i>) • Coronary artery disease (<i>CARPA STM p252</i>) • Heart failure (<i>CARPA STM p266</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Blocks effects of hormone that causes high BP • High BP can harm kidneys and heart 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Cough</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Dizzy</p> </div> <div style="text-align: center;">  <p>Kidney trouble – damage may get worse</p> </div> </div> <div style="margin-top: 20px;">  <p>Allergic reaction</p> <p>If swollen face and throat make it hard to breathe – think of allergy</p> </div>




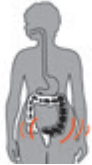


 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Old people – use lower dose</p> </div> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Kidney trouble – may need lower dose</p> </div> <div style="text-align: center;">  <p>Medical consult straight away if face and throat start to swell</p> </div> </div> <p>Interactions — Do not use together without medical consult PERINDOPRIL or RAMIPRIL with:</p> <ul style="list-style-type: none"> • NSAID • Lithium • Potassium <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Dangerous medicine combination that can cause kidney failure. Tell patients taking ACE inhibitor or ARB and diuretics not to take NSAIDs</p> </div> </div> <p>ACE inhibitor/ARB + diuretic + NSAID</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Cough will sometimes settle down. If it doesn't see doctor to have the tablets changed • Might make you feel dizzy when you stand up quickly • Do not take potassium supplements unless they are prescribed for you, or eat a lot of potassium rich food (eg bananas, potatoes) <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="text-align: center;"> <p>Do not stop taking medicine – you may not feel different, but medicine will help stop damage to your heart and kidneys</p> </div> <div style="text-align: center;"> <p>Return to clinic straight away if swelling of lips or mouth, or having trouble breathing</p> </div> </div>
<p>Check</p>	<div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>Check kidney function (UEC), potassium level, rheumatoid factor (RF) 1–2 weeks after starting medicine, then every 6–12 months</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <p>BP</p> <p>Blood test</p> </div>





<p>Active ingredients (generic names)</p>	<p>AMIODARONE (a-me-o-da-rone) Common brands include: <i>Aratac, Cordarone X, Rithmik</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Heart attack with persistent VT or VF (CARPA STM p13) • Treat and prevent life-threatening abnormal heart rhythms (arrhythmias) <p>Doses — CARPA STM p17</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Helps heart beat regularly by slowing nerve impulses in the heart, and making heart muscle fibres less responsive to abnormal nerve impulses 
<p>Side effects</p>	<ul style="list-style-type: none"> • Loss of appetite • Metallic taste • Disturbs functioning of thyroid gland (see Anatomy dictionary p311) • Blue-grey skin colouring may be seen on lighter skinned patients <p>Note: Amiodarone takes a long time to be removed from body so side effects take a while to go away after stopping.</p>  <p>Nausea and vomiting</p>  <p>Constipation</p>  <p>Trouble sleeping</p>











 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Breathing trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Amidarone interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> Do not drink grapefruit juice — can increase amount of medicine in your blood stream and your chance of getting side effects <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Keep out of the sun</p> </div> <div style="text-align: center;">  <p>Return to clinic if you get shortness of breath, dry cough, eye problems, weight loss, muscle weakness, <i>OR</i> heart problems get worse</p> </div> </div> <p>Warning stickers (p298): 5, 8, 18</p>
<p>Check</p>	<ul style="list-style-type: none"> Lung function before starting, then every 6–12 months Vision every year <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Chest x-ray and ECG before starting medicine, then every year</p> </div> <div style="text-align: center;">  <p>Blood test</p> </div> <div style="text-align: left;"> <p>Check FBC, thyroid function (TFT), liver function tests (LFT), potassium level before starting medicine, then every 6 months</p> </div> </div>











<p>Active ingredients (generic names)</p>	<p>IRBESARTAN (ir-be-sar-tan) </p> <p>Common brands include: <i>Avapro, Irprestan, Karvea</i></p> <p>TELMISARTAN (tel-mi-sar-tan)</p> <p>Common brands include: <i>Micardis, Mizart, Teltartan</i></p> <p>IRBESARTAN + HYDROCHLOROTHIAZIDE (ir-be-sar-tan + hy-dro-chlo-ro-thi-a-zide)</p> <p>Common brands include: <i>Abisart HCT, Avapro HCT, Karvezide</i></p> <p>Common names: ARBs (say A, R, Bs) or sartans</p> <p>Other ARBs or sartans</p> <p>Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Candesartan • Losartan • Valsartan • Eprosartan • Olmesartan <p>Other ARB & diuretic combinations</p> <p>Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Candesartan + HCT (eg <i>Adesan HCT, Atacand Plus</i>) • Eprosartan + HCT (eg <i>Teveten Plus</i>) • Olmesartan + HCT (eg <i>Ometec Plus</i>) • Telmisartan + HCT (eg <i>Micardis Plus, Pitor Plus, Teltartan HCT</i>) • Valsartan + HCT (eg <i>Co-Diovan</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chronic kidney disease if patient can't take ACE inhibitor (irbesartan) (CARPA STM p246) • High BP (hypertension) (irbesartan) (CARPA STM p269) • Slowing kidney and heart damage in people with diabetes • Can be used instead of ACE inhibitor if ACE inhibitor causes cough
<p>How it works</p>	<ul style="list-style-type: none"> • Blocks effects of hormone that causes high BP • High BP can harm kidneys and heart 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Dizzy when standing up</p> </div> <div style="text-align: center;">  <p>Kidney trouble – damage may get worse</p> </div> </div> <div style="margin-top: 20px;">  <p>Allergic reaction</p> <p>If swollen face and throat make it hard to breathe – think of allergy</p> </div>









 <p>Warnings</p>	<ul style="list-style-type: none"> • Use under specialist advice if patient has bad reaction to ACE inhibitors <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Medical consult straight away if face and throat start to swell</p> </div>
	<p>Interactions — Do not use together without medical consult IRBESARTAN or TELMISARTAN with</p> <ul style="list-style-type: none"> • NSAID • Potassium <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; text-align: center; margin-right: 10px;">  <p>Triple Whammy!</p> </div> <div> <p>Dangerous medicine combination that can cause kidney failure. Tell patients taking ACE inhibitor or ARB and diuretics not to take NSAIDs</p> </div> </div> <p>ACE inhibitor/ARB + diuretic + NSAID</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not take potassium supplements unless prescribed for you, or eat a lot of potassium-rich food (eg bananas, potatoes) • Medicine may make you feel dizzy if you stand up quickly <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Return to clinic straight away if swelling of lips or mouth, or having trouble breathing</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Do not stop taking medicine – you may not feel different, but medicine will help stop damage to your heart and kidneys</p> </div> </div>
<p>Check</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>BP</p> </div> <div style="text-align: center;">  <p>Blood test</p> </div> </div> <p>Check potassium levels, kidney function (UEC) every 6–12 months</p>










<p>Active ingredients (generic names)</p>	<p>ATROPINE (at-row-peen) Common brands include: <i>Atropine Minijet</i></p>  <p>Other antiarrhythmics Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Adenosine • Amiodarone (p104) • Digoxin (p116) • Disopyramide • Esmolol • Flecainide • Isoprenaline • Lidocaine (lignocaine) • Sotalol • Verapamil (p114)
<p>What it is used for</p>	<ul style="list-style-type: none"> • To increase a very slow heart rate (Life support — DRS ABC) (CARPA STM p13) • Organophosphate (eg insecticide) poisoning <p>Doses — CARPA STM p17</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Helps to increase the heart rate when too slow by affecting receptors in the involuntary (parasympathetic) and central nervous systems • Blocks the uptake of some poisons (eg organophosphates), helps to reverse the effects
<p>Side effects</p>	<ul style="list-style-type: none"> • Difficult to pee / retention of urine • Bothered by bright light • Delirium <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Flushing</p> </div> <div style="text-align: center;">  <p>Blurred vision</p> </div> <div style="text-align: center;">  <p>Constipation</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Dry mouth</p> </div> <div style="text-align: center;">  <p>Fast pulse (heart rate)</p> </div> </div>



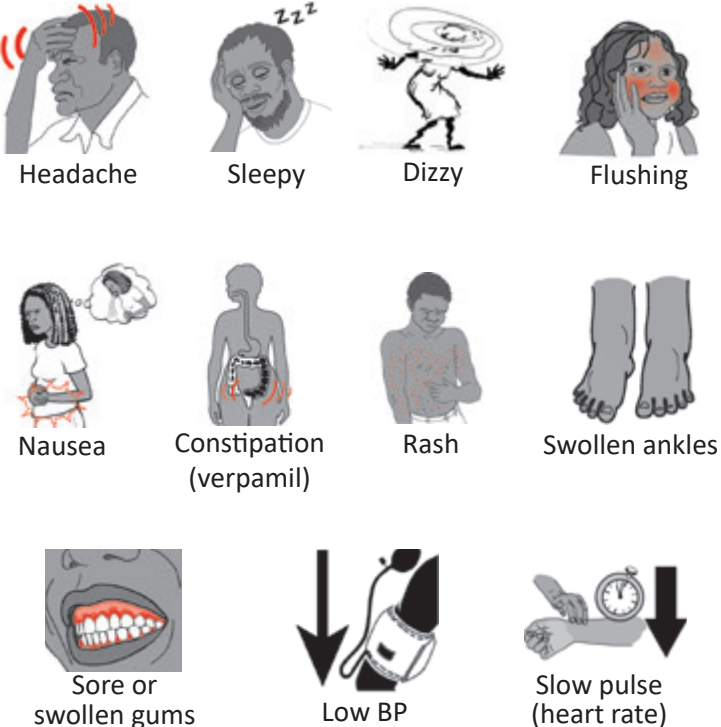
 <p>Warnings</p>	<p>Interactions — Do not use together without medical consult</p> <p>ATROPINE with:</p> <ul style="list-style-type: none"> • Phenylephrine
 <p>Tell the patient</p>	
<p>Check</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pulse (heart rate)</p> </div> <div style="text-align: center;">  <p>BP</p> </div> </div>













<p>Active ingredients (generic names)</p>	<p>ATENOLOL (a-ten-o-lol) Common brands include: <i>Noten, Tenormin, Tensig</i></p> <p>BISOPROLOL (bis-o-pro-lol) Common brands include: <i>Bicor, Biso, Bispro</i></p> <p>CARVEDILOL (car-ve-dil-ole) Common brands include: <i>Dilatrend, Vedilol, Volirop</i></p> <p>METOPROLOL (me-toe-pro-lol) Common brands include: <i>Betaloc, Minax, Toprol XR</i></p> <p>NEBIVOLOL (ne-biv-o-lol)  Common brands include: <i>Nebilet</i></p> <p>Other beta-blockers Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Labetalol • Pindolol • Oxprenolol • Propranolol
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chest pain (angina) • Chronic heart failure (CARPA STM p267) • Irregular heart beat (arrhythmias) • Lowering BP in <ul style="list-style-type: none"> ◦ Chronic kidney disease (CARPA STM p246) ◦ Coronary artery disease (CARPA STM p252) ◦ High BP (hypertension) (CARPA STM p269)
<p>How it works</p>	<ul style="list-style-type: none"> • Beta receptors in heart increase BP and heart rate when activated • Beta-blockers <ul style="list-style-type: none"> ◦ Block these receptors to reduce workload of heart. Can also work in other parts of body ◦ Lower BP, slow heart, even out irregular heart beats ◦ Lower risk of heart attacks, and death in people who have had heart attacks 
<p>Side effects</p>	<ul style="list-style-type: none"> • Coldness in fingers and toes <div style="display: grid; grid-template-columns: repeat(4, 1fr); gap: 10px;"> <div style="text-align: center;">  Nausea </div> <div style="text-align: center;">  Diarrhoea </div> <div style="text-align: center;">  Sleepy </div> <div style="text-align: center;">  Dizzy </div> <div style="text-align: center;">  Dizzy when standing up </div> <div style="text-align: center;">  Breathing trouble </div> <div style="text-align: center;">  Slow pulse (heart rate) </div> <div style="text-align: center;">  Low BP </div> </div>



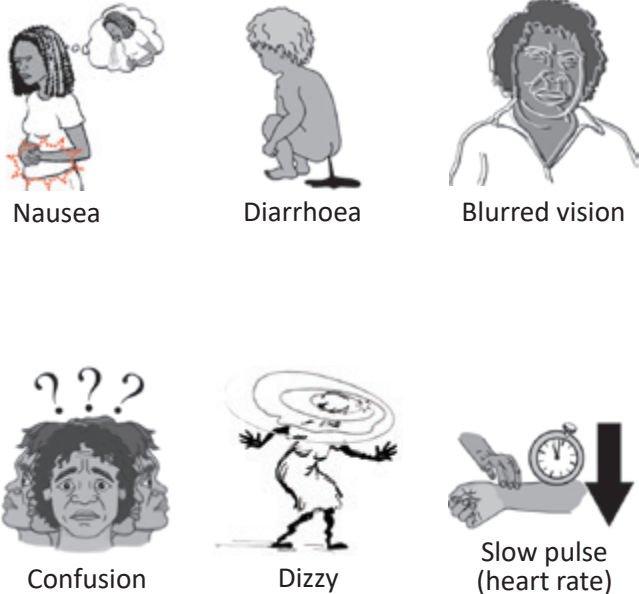
 <p>Warnings</p>	 <p>Pregnant</p>  <p>Kidney trouble (atenolol)</p>  <p>Asthma or chronic lung disease</p>  <p>Slow pulse (heart rate) If pulse less than 50/min – medical consult</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May make you feel dizzy if you stand up quickly  <p>Do not stop taking medicine – you may not feel different, but medicine will help stop damage to your heart and kidneys</p>  <p>Do not drive or operate machinery if sleepy</p>
<p>Check</p>	 <p>BP</p>  <p>Pulse (heart rate)</p>
<p>Interactions — Do not use together without medical consult</p> <p>BETA-BLOCKERS with:</p> <ul style="list-style-type: none"> • Amiodarone • Digoxin • Diltiazem • Verapamil <p>Warning stickers (p298): Atenolol, nebivolol 9, 12 Bisoprolol, metoprolol 9, 12, A Carvedilol 9, 12, 13, 16</p>	


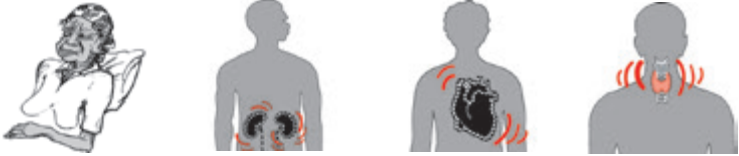



<p>Active ingredients (generic names)</p>	<p>AMLODIPINE (am-lo-di-peen) Common brands include: <i>Amlo, Nordip, Norvasc</i></p> <p>FELODIPINE (fe-lo-di-peen) Common brands include: <i>Felodil XR, Felodur ER, Plendil ER</i></p> <p>LERCANIDIPINE (ler-can-i-di-peen) Common brands include: <i>Lercadip, Lercan, Zanidip</i></p> <p>NIFEDIPINE (ni-fed-i-peen) Common brands include: <i>Adalat, Addos, Adefin</i></p> <p>Combination medicines Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Calcium channel blocker + statin • Calcium channel blocker + ACE inhibitor
<p>What it is used for</p>	<ul style="list-style-type: none"> • Coronary artery disease (<i>CARPA STM p252</i>) • High BP (hypertension) (<i>CARPA STM p269</i>) • High BP in chronic kidney disease (<i>CARPA STM p246</i>) • Severe pre-eclampsia — very high BP in pregnancy (nifedipine) (<i>WBM p22</i>) • Stopping labour (tocolysis) (nifedipine) (<i>WBM p32</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Relaxes muscle in blood vessel walls to allow more blood to flow through — helps reduce high BP and angina • Relaxes muscles in uterus (in pregnancy) 
<p>Side effects</p>	<ul style="list-style-type: none"> • Palpitations <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Rash</p> </div> <div style="text-align: center;">  <p>Flushing</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Dizzy</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Swollen ankles</p> </div> <div style="text-align: center;">  <p>Mouth and gum problems</p> </div> </div>







 <p>Warnings</p>	 <p>Pregnant</p>  <p>Breastfeeding (nifedipine appears safe)</p>  <p>Liver trouble</p>  <p>Heart failure</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <p>LERCANIDIPINE with:</p> <ul style="list-style-type: none"> • Metoprolol <p>NIFEDIPINE with:</p> <ul style="list-style-type: none"> • Digoxin — can be taken but must be closely monitored • IV magnesium <ul style="list-style-type: none"> • Do not drink grapefruit juice — can increase amount of medicine in your bloodstream and chance of getting side effects • Slow-release tablets (felodipine, nifedipine) must be swallowed whole • Medicine may make you dizzy, especially if you stand up quickly  <p>Do not stop taking medicine — you may not feel different, but medicine will help stop damage to your heart and kidneys</p>  <p>Do not drive or operate machinery if sleepy</p> <p>Warning stickers (p298): Amlodipine 9,12 Felodipine 9, 12, 18, A Lercanidipine 9, 12, 18, C Nifedipine 9, 12, 13, 18, A</p>
<p>Check</p>	 <p>BP</p>
















<p>Active ingredients (generic names)</p>	<p>DILTIAZEM (dil-ti-a-zem) Common brands include: <i>Cardizem, Dilzem, Vasocardol</i></p> <p>VERAPAMIL (vera-pam-il) Common brands include: <i>Anpec, Cordilox, Isoptin, Veracaps</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • High BP (hypertension) (CARPA STM p269) • High BP in chronic kidney disease (diltiazem slow-release) (CARPA STM p246) • Preventing chest pain (angina) • Irregular heart beat
<p>How it works</p>	<ul style="list-style-type: none"> • Relaxes muscle in blood vessel wall and heart to allow more blood to flow through — helping to reduce high BP and angina 
<p>Side effects</p>	 <p>Headache Sleepy Dizzy Flushing</p> <p>Nausea Constipation (verpamil) Rash Swollen ankles</p> <p>Sore or swollen gums Low BP Slow pulse (heart rate)</p>







 <p>Warnings</p>	 <p>Pregnant</p>  <p>Breastfeeding</p>  <p>Slow pulse (heart rate)</p>  <p>Liver trouble</p>  <p>Heart trouble</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Diltiazem and verapamil interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> • Do not crush — swallow whole • Do not drink grapefruit juice — can increase amount of medicine in bloodstream and chance of getting side effects • Medicine may make you dizzy, especially if you stand up quickly  <p>Do not drink alcohol (grog) (verapamil)</p>  <p>Do not drive or operate machinery if sleepy</p>  <p>Do not stop taking medicine — you may not feel different, but medicine will help stop damage to your heart and kidneys</p>
	<p>Warning stickers (p298): Diltiazem 5, 9, 12, A Verapamil 5, 9, 12, 13, 18, A, B</p>
<p>Check</p>	 <p>BP</p>  <p>Pulse</p>






<p>Active ingredients (generic names)</p>	<p>DIGOXIN (di-jox-in) Common brands include: <i>Lanoxin, Sigmamaxin</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chronic heart failure (<i>CARPA STM p266</i>) • Irregular heart beat (atrial fibrillation)
<p>How it works</p>	<ul style="list-style-type: none"> • Makes heart beat stronger • Slows heart to stop fluttery irregular heart beat 
<p>Side effects</p>	<ul style="list-style-type: none"> • Loss of appetite (anorexia)  <p>Nausea Diarrhoea Blurred vision</p> <p>Confusion Dizzy Slow pulse (heart rate)</p>


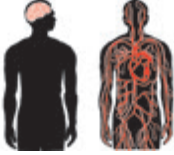






 <p>Warnings</p>	<ul style="list-style-type: none"> • Digoxin is a strong medicine. Problems can occur if patient given too much — check doses carefully  <p>Old people Kidney trouble Heart trouble Thyroid problems</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Digoxin interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> • Make sure you tell other doctors and health people you are taking this medicine • Regular blood tests are needed  <p>Return to clinic straight away if nausea, vomiting, no appetite (anorexia) – these are signs of overdose</p> <p>Warning stickers (p298): 5</p>
<p>Check</p>	<ul style="list-style-type: none"> • If using with a diuretic — check potassium, calcium and magnesium levels • Monitor digoxin levels as advised by doctor  <p>Check kidney function (UEC) before starting medicine, then every 3–6 months</p> <p>Blood test</p>



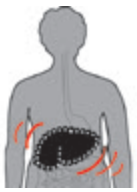




<p>Active ingredients (generic names)</p>	<p>FUROSEMIDE (FRUSEMIDE) (fur-rose-mide) Common brands include: <i>Lasix, Uremide, Urex</i></p>  <p>Other loop diuretics Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Bumetanide • Ethacrynic acid
<p>What it is used for</p>	<ul style="list-style-type: none"> • Acute heart failure (acute pulmonary oedema) (<i>CARPA STM p264</i>) • Chronic heart failure (<i>CARPA STM p266</i>) • Reducing fluid build up associated with heart, liver and kidney trouble
<p>How it works</p>	<ul style="list-style-type: none"> • Slows down reabsorption of sodium and chloride (salt) in kidneys to stop fluid accumulating, and removes excess fluid 
<p>Side effects</p>	<ul style="list-style-type: none"> • Risk of side effects increases as dose increases • Body salts (electrolytes) out of balance (eg low potassium, low magnesium) • Muscle weakness and cramps — from dehydration and low potassium  <p>Rash</p>  <p>Dizzy when standing up</p>  <p>Gout</p>  <p>Dehydration</p>




 <p>Warnings</p>	 <p>Pregnant</p>  <p>Breastfeeding</p>  <p>Old people</p>  <p>Dehydration</p>  <p>Kidney trouble</p>  <p>Liver trouble</p>  <p>Gout</p>
	<p>Interactions — Do not use together without medical consult</p> <p>FUROSEMIDE (FRUSEMIDE) with:</p> <ul style="list-style-type: none"> • NSAIDs • ACE inhibitors • Aminoglycosides • ARBs • Lithium • Thiazide diuretics <div style="border: 1px solid black; padding: 5px; display: inline-block;">  <p>Triple Whammy!</p> </div> <p>ACE inhibitor/ARB + diuretic + NSAID</p> <p>Dangerous medicine combination that can cause kidney failure. Tell patients taking ACE inhibitor or ARB and diuretics not to take NSAIDs</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not take with NSAIDs (type of painkiller) (p222) • Might make you pee a lot, so take in morning. If taking twice a day take second dose at midday <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Dizzy when standing up</p> </div> <div style="text-align: center;">  <p>Take in the morning to reduce night time waking</p> </div> </div>
<p>Check</p>	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>Blood test</p> </div> <div style="text-align: center;"> <p>Check kidney function and electrolytes (UEC) before starting medicine, then every 6–12 months</p> </div> <div style="text-align: center;">  <p>BP</p> </div> <div style="text-align: center;">  <p>Weight</p> </div> </div>








<p>Active ingredients (generic names)</p>	<p>HYDRALAZINE (hi-dral-a-zeen) Common brands include: <i>Alphapress, Apresoline</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Severe pre-eclampsia (very high BP in pregnancy) (<i>WBM p23</i>) • High BP emergency • Heart failure
<p>How it works</p>	<ul style="list-style-type: none"> • Opens (dilates) blood vessels between arteries and veins (arterioles) to quickly drop BP
<p>Side effects</p>	<ul style="list-style-type: none"> • Palpitations  <p>Headache</p>  <p>Dizzy</p>  <p>Fast pulse (heart rate)</p>  <p>Swollen ankles</p>  <p>Flushing</p>




 <p>Warnings</p>	 <p>Pregnant Heart trouble Kidney trouble Liver trouble</p>
 <p>Tell the patient</p>	 <p>Do not drive or operate machinery if dizzy or faint</p> <p>Warning stickers (p298): 12, 16</p>
<p>Check</p>	 <p>Blood test</p> <p>If taking for more than 6 months — antinuclear antibodies (ANA), FBC before starting and during treatment</p>





<p>Active ingredients (generic names)</p>	<p>METHYLDOPA (meth-il-do-pa) Common brands include: <i>Aldomet, Hydopa</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • High BP (hypertension) in pregnancy (<i>WBM p129</i>) • High BP in pregnant women with pre-existing diabetes (<i>WBM p120</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Works in brain to send nerve signals which relax blood vessels — this reduces pressure of blood flow 
<p>Side effects</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;">  <p>Dizzy</p> </div> <div style="text-align: center;">  <p>Sleepy</p> </div> <div style="text-align: center;">  <p>Dry mouth</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Fever</p> </div> </div>









 <p>Warnings</p>	 <p>Kidney trouble</p>  <p>Liver trouble</p>  <p>Depression</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Stand up slowly if they make you dizzy  <p>Do not drive or operate machinery if sleepy or dizzy</p> <p>Warning stickers (p298): 12, 16</p>
<p>Check</p>	 <p>Blood test</p> <p>Check FBC, liver function tests (LFT) within 6–12 weeks of starting</p>








<p>Active ingredients (generic names)</p>	<p>GLYCERYL TRINITRATE (glis-er-al tri-nite-trate) Common brands include: <i>Anginine, Minitran, Nitro-Dur, Nitrolingual, Transiderm-Nitro</i></p> <p>ISOSORBIDE DINITRATE (i-so-sor-bide die-nie-trate) Common brands include: <i>Isordil</i></p> <p>ISOSORBIDE MONONITRATE (i-so-sor-bide mon-o-nie-trate) Common brands include: <i>Duride, Imdur, Monodur</i></p>  <p>Common name: GTN, nitrates</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chest pain — acute (CARPA STM p49) • Chest pain — angina (CARPA STM p253) • Acute heart failure (acute pulmonary oedema) (CARPA STM p264) • Doctor may ask for patch to be put on person with really high BP who needs to be sent to hospital
<p>How it works</p>	<ul style="list-style-type: none"> • Opens up blood vessels and reduces work heart has to do to pump blood • Glyceryl trinitrate and isosorbide dinitrate tablets and spray work fast to stop chest pain • Glyceryl trinitrate patches and isosorbide mononitrate tablets work slowly to prevent chest pain. They won't stop chest pain once it starts 
<p>Side effects</p>	<ul style="list-style-type: none"> • Palpitations  <p>Headache Dizzy when standing up Flushing Swollen ankles</p>

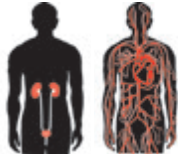

 <p>Warnings</p>	 <p>Pregnant</p>  <p>Low BP</p> <p>Interactions — Do not use together without medical consult NITRATES with:</p> <ul style="list-style-type: none"> • Medicines for impotence (eg <i>Viagra</i>) • Medicines for BP
 <p>Tell the patient</p>	<p>Slow acting</p> <ul style="list-style-type: none"> • Put patches on clean dry skin, on chest or upper arm (<i>CPM p343</i>) <ul style="list-style-type: none"> ◦ Do not leave patches on all the time. Put on at night and take off in morning <i>OR</i> put on in morning and take off at night • Slow-release tablets must be swallowed whole. Only take 1 a day <p>Fast acting</p> <ul style="list-style-type: none"> • Sit or lie down when taking tablets or spray, then rest for 15–30 minutes, or you may get dizzy • Keep tablet bottle closed and in a cool place • Take glyceryl trinitrate tablets back to clinic 3 months after you open them (they will be out of date) <div style="display: flex; justify-content: space-around;"> <div>  <p>Sublingual tablets</p> <p>Do not swallow fast-acting tablet. Put under tongue, spit out when chest pain stops – helps stop side effects</p> </div> <div>  <p>Return to clinic straight away if 2 doses in 15 minutes doesn't stop the pain – you may be having a heart attack</p> </div> </div> <p>Warning stickers (<i>p298</i>): Glyceryl trinitrate 16 – sublingual tablets also 7b, 13 – patches also 13, 21 Isosorbide dinitrate 16 Isosorbide mononitrate 16, A</p>
<p>Check</p>	<ul style="list-style-type: none"> • Make sure person has fast-acting glyceryl trinitrate at home and knows how to use it  <p>BP</p>












<p>Active ingredients (generic names)</p>	<p>SPIRONOLACTONE (spir-on-o-lac-tone) Common brands include: <i>Aldactone, Spiractin</i></p>  <p>Other aldosterone antagonists Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Eplerenone
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chronic heart failure (<i>CARPA STM p266</i>) in combination with other medicines
<p>How it works</p>	<ul style="list-style-type: none"> • Aldosterone is one of the hormones in the kidney that works to control BP and keep kidney working. Too much aldosterone upsets balance of hormones and causes fluid build up, increases BP • Spironolactone works against aldosterone and balances hormones 
<p>Side effects</p>	<ul style="list-style-type: none"> • Muscle weakness • Breast pain • Potassium too high (hyperkalaemia) <ul style="list-style-type: none"> ◦ Signs are: slow heartbeat, muscle twitch, numbness, sore head, nausea, vomiting  <p>Headache</p>



 <p>Warnings</p>	 <p>Pregnant Old people Kidney trouble Liver trouble</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <p>SPIRONOLACTONE with:</p> <ul style="list-style-type: none"> • NSAIDs • Potassium • Trimethoprim <ul style="list-style-type: none"> • If kidney trouble — don't have a lot of potassium rich food (eg bananas, potatoes) • If unsure about what to eat — get advice from a dietitian
<p>Check</p>	<p>Warning stickers (p298): 11, 12, 16, B</p>  <p>Blood test</p> <p>Check potassium levels every week for 1 month, then once a month for 2 months, then every 3 months</p>








<p>Active ingredients (generic names)</p>	<p>ATORVASTATIN (a-tor-va-sta-tin) Common brands include: <i>Atorvachol, Lipitor, Trovas</i></p> <p>ROSUVASTATIN (row-soo-va-sta-tin) Common brands include: <i>Cavstat, Crestor, Rostor</i></p> <p>SIMVASTATIN (sim-va-sta-tin) Common brands include: <i>Lipex, Zimstat, Zocor</i></p> <p>Common name: statins</p>  <p>Other statins Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Fluvastatin • Pravastatin
<p>What it is used for</p>	<ul style="list-style-type: none"> • Managing cardiovascular risk and abnormal blood fats (<i>CARPA STM p231</i>) • Reducing risk of heart attack in coronary artery disease (<i>CARPA STM p252</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Stops liver making too much cholesterol. Cholesterol can block blood vessels and cause heart attack or stroke 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Sore muscles</p> </div> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Dizzy</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Trouble sleeping</p> </div> <div style="text-align: center;">  <p>Liver trouble – medicine can cause a change in liver function</p> </div> </div>





 <p>Warnings</p>	 <p>Pregnant Breastfeeding Kidney trouble – may need lower dose Liver trouble – use lower dose of rosuvastatin</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Statis interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine Important to exercise and eat low fat food as well as taking tablets Will need regular blood tests to make sure medicine is working and there are no side effects If taking atorvastatin or simvastatin — do not drink grapefruit juice. Can increase amount of medicine in bloodstream and chance of getting side effects  <p>Take at night (simvastatin)</p>  <p>Return to clinic if you get sore or tired muscles OR your urine is dark</p>  <p>Do not stop taking medicine – you may not feel different, but medicine will help stop damage to your heart and kidneys</p> <p>Warning stickers (p298): Atorvastatin, simvastatin 18</p>
<p>Check</p>	 <p>Check LFT and CK before starting medicine, repeat if indicated clinically</p> <p>Blood test</p>





<p>Active ingredients (generic names)</p>	<p>INDAPAMIDE (in-dap-a-mide) Common brands include: <i>Dapa-Tabs, Insig, Natrilix</i></p> <p>HYDROCHLOROTHIAZIDE + IRBESARTAN (hy-dro-chlo-ro-thi-a-zide + ir-be-sar-tan) Common brands include: <i>Abisart HCT Avapro HCT, Karvezide</i></p> <p>INDAPAMIDE + PERINDOPRIL (in-dap-a-mide + per-in-doe-pril) Common brands include: <i>Coversyl Plus, Idaprex Combi, Perindo Combi</i></p> <p>Other thiazide diuretics Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Chlorthalidone • Hydrochlorothiazide (HCT) <p>Other ACE inhibitor & thiazide diuretic combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Enalapril + HCT (eg <i>Renitec Plus</i>) • Fosinopril + HCT (eg <i>Fosetic, Monoplus</i>) • Quinapril + HCT (eg <i>Accuretic</i>) <p>Other ARB & thiazide diuretic combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Candesartan + HCT (eg <i>Adesan HCT, Atacand Plus</i>) • Eprosartan + HCT (eg <i>Teveten Plus</i>) • Olmesartan + HCT (eg <i>Ometec Plus</i>) • Telmisartan + HCT (eg <i>Micardis Plus, Pritor Plus, Teltartan HCT</i>) • Valsartan + HCT (eg <i>Co-Diovan</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • High BP (hypertension) (<i>CARPA STM p269</i>) • Reducing fluid build up caused by heart failure or kidney problems
<p>How it works</p>	<ul style="list-style-type: none"> • In low doses — opens up blood vessels to lower BP • In high doses — helps kidneys to remove extra fluid from body 
<p>Side effects</p>	<ul style="list-style-type: none"> • The higher the dose the greater the risk of side effects • Weak muscles or cramps  <p>Dizzy</p>



 <p>Warnings</p>	    <p>Pregnant Old people Kidney trouble Gout</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <p>INDAPAMIDE with:</p> <ul style="list-style-type: none"> • NSAIDs • Lithium <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Dangerous medicine combination that can cause kidney failure. Tell patients taking ACE inhibitor or ARB and diuretics not to take NSAIDs</p> </div> </div> <p>ACE inhibitor/ARB + diuretic + NSAID</p> <ul style="list-style-type: none"> • Slow-release tablets must be swallowed whole • You may pee more to start but this will be much better after a few days <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take in morning to reduce night time waking</p> </div> <div style="text-align: center;">  <p>Dizzy when standing up</p> </div> </div>
<p>Check</p>	<p>Warning stickers (p298): Indapamide 16, A Hydrochlorothiazide + irbesartan, indapamide + perindopril 11, 12, 16, 21, A</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>BP</p> </div> <div style="text-align: center;">  <p>Blood test</p> </div> </div> <p>Check kidney function and electrolytes (UEC) before starting medicine, then every 6–12 months</p>






<p>Active ingredients (generic names)</p>	<p>BENZYL BENZOATE (benz-el benz-o-ate) Common brands include: <i>Ascabiol, Benzemul</i></p> <p>CROTAMITON (crow-ta-mi-ton) Common brands include: <i>Eurax</i></p> <p>PERMETHRIN (per-meth-rin) Common brands include: <i>Lyclear, Quellada Scabies Treatment</i></p>  <p>Common name: scabies medicines</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Chickenpox — for itch (crotamiton) (CARPA STM p333) • Crusted scabies (benzyl benzoate, permethrin) (CARPA STM p396) • Scabies (benzyl benzoate, permethrin) (CARPA STM p394)
<p>How it works</p>	<ul style="list-style-type: none"> • Kills the mites
<p>Side effects</p>	<ul style="list-style-type: none"> • Stings when first applied (benzyl benzoate)  <p>Itchy rash and swelling – may get worse before it gets better</p>

 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Babies under 2 months (permethrin)</p> </div> <div style="text-align: center;">  <p>Babies under 6 months (benzyl benzoate)</p> </div> <div style="text-align: center;">  <p>Old people (benzyl benzoate)</p> </div> </div> <ul style="list-style-type: none"> • Do not put crotamiton on whole body of small children more than once a day • Dilute benzyl benzoate with water before applying to children <ul style="list-style-type: none"> ◦ Children 6–23 months — 3 parts water to 1 part benzyl benzoate ◦ Children 2–12 years and sensitive adults — equal parts water and benzyl benzoate • Test benzyl benzoate on small area of skin first — wait for 10 minutes
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Apply and wash off after 24 hours with warm soapy water, rinse thoroughly • Do not use benzyl benzoate on eyes, lips or mouth • If scabies rash is still itchy after applying benzyl benzoate or permethrin cream — use soothing cream (eg sorbolene) • Repeat treatment after 5 days • Wash clothes and bed linen in hot water and hang to dry in the sun <div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 20px;"> <div style="text-align: center;">  <p>Return to clinic if still itchy in 2–3 weeks</p> </div> <div style="text-align: center;">  <p>Treat everyone living in house – one may be source of re-infection</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Make sure using correct strength of permethrin — 5% for scabies • If person on immunosuppressants (p216) — more susceptible to crusted scabies






<p>Active ingredients (generic names)</p>	<p>DIMETICONE (di-met-i-cone) Common brands include: <i>Hedrin Treatment</i></p> <div style="display: flex; justify-content: center; gap: 20px;">   </div> <p>Common name: head lice treatment</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Head lice (nits) (<i>CARPA STM p387</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Kills the lice — unclear how it works 
<p>Side effects</p>	 <p style="text-align: center;">Itch</p>




 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not get on eyes, mouth, inside nose
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Treatment for adults and children is the same • For lotion — completely cover dry hair, allow to dry, leave on for 8 hours • For fast-acting gel spray — completely cover dry hair, leave on for 15 minute • Wash out, then use fine tooth comb to remove eggs and dead lice • Wash clothes and bed linen in hot water and hang to dry in sun • Repeat treatment after 7 days • Remove lice between treatments using ordinary hair conditioner on dry hair and fine tooth comb <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Return to clinic if still itchy in 2–3 weeks</p> </div> <div style="text-align: center;">  <p>Treat everyone living in house – one may be source of re-infection</p> </div> </div>
<p>Check</p>	








<p>Active ingredients (generic names)</p>	<p>HYDROCORTISONE (hy-dro-cor-ti-sone) Common brands include: <i>Cortef, DermAid, Sigmacort</i></p>  <p>Other corticosteroids Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Betamethasone • Desonide • Methylprednisolone • Mometasone • Triamcinolone <p>Corticosteroid combinations</p> <ul style="list-style-type: none"> • Topical corticosteroids can be combined with topical antifungals
<p>What it is used for</p>	<ul style="list-style-type: none"> • Severe nappy rash (CARPA STM p406) • Inflammation of the skin
<p>How it works</p>	<ul style="list-style-type: none"> • Helps to reduce redness (inflammation) from various skin conditions. Some brands are stronger than others 
<p>Side effects</p>	<ul style="list-style-type: none"> • Short-term use — usually none • Long-term use — skin damage can occur



 <p>Warnings</p>	 <p>Children under 12 years</p>  <p>Old people</p>  <p>Medical consult if needed for more than a short time</p> <ul style="list-style-type: none"> • Diabetes — don't use a lot • Make sure area to be treated is not infected • Use lowest strength to treat first <i>OR</i> use higher strength for shortest time <ul style="list-style-type: none"> ◦ In children use higher strength for a shorter time • Do not use on face unless advised by doctor
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Use a small amount — not like moisturiser • Use moisturisers as well (eg sorbolene) • If using for a long time have regular rests from treatment (eg use for 5 days then stop for 2 days)
<p>Check</p>	<ul style="list-style-type: none"> • Try to find underlying cause of skin rash (eg fungal infection)







<p>Active ingredients (generic names)</p>	<p>IMIQUIMOD (i-mi-kwi-mod) Common brands include: <i>Aldara</i></p> <p>PODOPHYLLOTOXIN (po-do-fill-o-toxin) Common brands include: <i>Condyline paint, Wartec</i></p> <p>Other medicines for warts Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Glutaraldehyde • Podophyllum resin • Salicylic acid
<p>What it is used for</p>	<ul style="list-style-type: none"> • Genital warts — CARPA STM (p290), WBM (p258) • Some skin cancers (imiquimod)
<p>How it works</p>	<ul style="list-style-type: none"> • Helps immune system fight the warts (imiquimod) • Stops spread of warts to other areas of body, to other people
<p>Side effects</p>	<ul style="list-style-type: none"> • Blisters • Skin discolouring <div> </div> <p>Itching, burning</p>


 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use on broken skin • Autoimmune and other skin problems (eg psoriasis, eczema) may get worse when using imiquimod <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant (podophyllotoxin)</p> </div> <div style="text-align: center;">  <p>Breastfeeding (podophyllotoxin)</p> </div> </div>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult IMIQUIMOD or PODOPHYLLOTOXIN with:</p> <ul style="list-style-type: none"> • Immunosuppressants <ul style="list-style-type: none"> • Wash skin with soap and water and let dry before applying • Can weaken condoms and diaphragms. Wash off skin before using these • Do not use on or near hairline, eyes, ears, nose or lips — unless doctor tells you to • Imiquimod <ul style="list-style-type: none"> ◦ Use cotton swab or applicator ◦ Put on at bedtime and wash off 6–10 hours later • Podophyllotoxin <ul style="list-style-type: none"> ◦ Use cotton swab or applicator for lotion, glove for cream ◦ Put on wart only, can burn skin <div style="text-align: center;">  <p>Wash hands – before and after use</p> </div>
<p>Check</p>	<p>Warning stickers (p298): Imiquimod 8, K</p>





<p>Active ingredients (generic names)</p>	<p>NANOCRYSTALLINE SILVER DRESSING (nan-no-cris-ta-line sil-ver) Common brands include: <i>Acticoat</i></p> <p>SILVER SULFADIAZINE (sil-ver sul-fa-di-a-zeen) Common brands include: <i>Flamazine</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Partial thickness burns at risk of infection (CARPA STM p45) <ul style="list-style-type: none"> ◦ Use dressing if available, rather than ointment/cream • Treating infected leg ulcers and pressure sores
<p>How it works</p>	<ul style="list-style-type: none"> • Stops bacteria from growing on damaged skin 
<p>Side effects</p>	<ul style="list-style-type: none"> • Skin discolouration  <p>Itching, swelling, redness</p>



 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Pregnant (late term)</p> </div> <div style="text-align: center;">  <p>Babies under 6 months – medical or burns unit consult</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Medical consult if needed for more than a short time <i>OR</i> if burn infected – may need antibiotics</p> </div> <ul style="list-style-type: none"> • Allergy to sulfonamides • For ointment/cream (not dressing) <ul style="list-style-type: none"> ◦ ONLY use for deep burns ◦ Do not use on burns being sent to hospital. Makes it hard to assess burn and delays further treatment ◦ Do not use same tube/container for more than 1 person
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Burns and ulcers must be cleaned and have dressings changed regularly • Do not wash cream off with soap — use normal saline • May darken or discolour skin <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic if wound doesn't heal</p> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Check procedure for applying silver coated dressing (<i>CPM p285</i>)




<p>Active ingredients (generic names)</p>	<p>DEXAMETHASONE + FRAMYCETIN + GRAMICIDIN (dex-a-meth-a-son-e + fra-my-cet-in + gram-i-ci-din) Common brands include: <i>Otodex, Sofradex</i></p> <p>TRIAMCINOLONE + NEOMYCIN + NYSTATIN + GRAMICIDIN (tri-am-sin-o-lone + ne-o-my-sin + ny-stat-in + gram-i-ci-din) Common brands include: <i>Kenacomb Otic, Otocomb Otic</i></p> <div style="text-align: center;">  </div> <p>Other antibacterial + steroid combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Flumethasone + clioquinol (eg <i>Locacorten Vioform</i>) • Hydrocortisone + ciprofloxacin (eg <i>Ciproxin HC</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Inflammation of the ear canal (otitis externa) (CARPA STM p180) • Nasal packing for nose bleed (CPM p169)
<p>How it works</p>	<ul style="list-style-type: none"> • Kills germs causing ear infection, reduces inflammation <div style="text-align: right;">  </div>
<p>Side effects</p>	<ul style="list-style-type: none"> • May cause redness (dermatitis) in ear if used for long time



 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use if eardrum has a hole (perforation)  <p>Medical consult if needed for more than a short time</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Don't touch ear with tip of bottle when putting in drops <div style="display: flex; justify-content: space-around;"> <div>  <p>Ear drops – use top of bottle to squeeze drops out</p> </div> <div>  <p>Dry mop ears – drops work best if pus cleaned out of ear first by dry mopping (CPM p164)</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic if you still have discharge after 5–7 days OR you have ringing in your ears, hearing loss, or feel unsteady</p> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Check drops not used for more than 5–7 days and any left over is returned to clinic • If discharge continues — ENT specialist consult




<p>Active ingredients (generic names)</p>	<p>CIPROFLOXACIN (sip-row-flox-a-sin) Common brands include: <i>Ciloquin, Ciloxan</i></p>  <p>Ciprofloxacin and steroid combination drops Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Hydrocortisone + ciprofloxacin (eg <i>Ciproxin HC</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Ear infection <ul style="list-style-type: none"> ◦ Acute otitis media with perforation (<i>CARPA STM p179</i>) ◦ Ongoing ear infection with discharge (chronic suppurative otitis media) (<i>CARPA STM p180</i>) ◦ Inflammation of ear canal (otitis externa) • Discharging grommets (<i>CARPA STM p181</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Antibiotic that stops bacteria from making DNA. DNA is important for the bacteria's growth
<p>Side effects</p>	<ul style="list-style-type: none"> • Long-term use may cause skin irritation








 <p>Warnings</p>	 <p>Medical consult if hole in eardrum (perforation) or grommets</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Shake bottle before using • Avoid touching ear with tip of bottle or dropper • Keep bottle away from light • If any unused drops 28 days after opening — take bottle back to clinic  <p>Dry mop ears – drops work best if pus cleaned out of ear first by dry mopping (CPM p164)</p>
<p>Check</p>	






<p>Active ingredients (generic names)</p>	<p>DOCUSATE (doc-u-sate) Common brands include: <i>Waxsol</i></p> <p>SODIUM BICARBONATE SOLUTION</p>  <p>Other wax softeners Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Carbamide peroxide • Dichlorobenzene + chlorbutol
<p>What it is used for</p>	<ul style="list-style-type: none"> • Softening wax before removal if too much and blocking ears (<i>CARPA STM p182</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Softens wax so it is easier to clean or drain from ear 
<p>Side effects</p>	<ul style="list-style-type: none"> • May cause irritation or itch in ear









 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use if sore, red ears or hole (perforation) in eardrum
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Don't use cotton buds in the ears, they push the wax further down  <p>Return to clinic – use for 2 days then come to clinic to have ears syringed</p>
<p>Check</p>	






<p>Active ingredients (generic names)</p>	<p>OXYMETAZOLINE (ox-ee-me-taz-o-leen) Common brands include: <i>Drixine, Logicin Rapid Relief</i></p> <p>XYLOMETAZOLINE (zy-low-me-ta-zo-leen) Common brands include: <i>FLO Xylo-POS, Otrivin</i></p>  <p>Other nasal decongestants Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Ephedrine • Phenylephrine (p150) • Tramazoline
<p>What it is used for</p>	<ul style="list-style-type: none"> • Colds • Hayfever • Sinus problems
<p>How it works</p>	<ul style="list-style-type: none"> • Narrows swollen blood vessels in nose to open up blocked nose • Dries up runny nose 
<p>Side effects</p>	<ul style="list-style-type: none"> • Might sting when first put in • Nasal discharge may increase when first used • If used for more than 4–5 days — nose may become blocked again and be worse than before (rebound congestion)










 <p>Warnings</p>	 <p>Children under 12 years – don't give to child under 6 years. Only give to child 6–11 years if told to by doctor or pharmacist</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not use for more than 5 days without talking to doctor • Try using saline drops for children with blocked noses • How to use nose drops <ul style="list-style-type: none"> ◦ Blow nose, tip head back and put drops in nose while sniffing gently. Repeat with other nostril. Keep head back for a few minutes ◦ For children (if advised by doctor or pharmacist) — lay child on lap with head tilted back and down, put drops in nose ◦ Rinse dropper after use, don't share with other people • How to use nasal spray <ul style="list-style-type: none"> ◦ Blow nose, shake bottle, put nozzle just inside nostril aiming towards outside wall, block the other nostril ◦ Squirt 1–2 times while sniffing gently. Repeat in other nostril <p>Note: May need to be primed, check manufacturer's instructions.</p>
<p>Check</p>	






<p>Active ingredients (generic names)</p>	<p>PHENYLEPHRINE (fen-il-eff-rin) Common brands include: <i>Dimetapp PE, Sudafed PE</i></p>   <p>Combinations</p> <ul style="list-style-type: none"> • Used in some cold and flu tablets
<p>What it is used for</p>	<ul style="list-style-type: none"> • Colds • Hayfever • Sinus problems
<p>How it works</p>	<ul style="list-style-type: none"> • Narrows swollen blood vessels in nose to open up blocked nose • Dries up runny nose 
<p>Side effects</p>	 <p>Can increase BP</p>  <p>Shaking, nervous</p>  <p>Dizzy</p>  <p>Trouble sleeping</p>






 <p>Warnings</p>	 <p>Pregnant (first trimester) Old people</p> <p>Children under 12 years – don't give to child under 6 years. Only give to child 6–11 years if told to by doctor or pharmacist</p>  <p>Heart trouble High BP</p>
	<p>Interactions — Do not use together without medical consult</p> <p>PHENYLEPHRINE with:</p> <ul style="list-style-type: none"> • Atropine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not use for more than 4 days • Do not give to children under 12 unless the doctor tells you to
<p>Check</p>	 <p>BP</p>





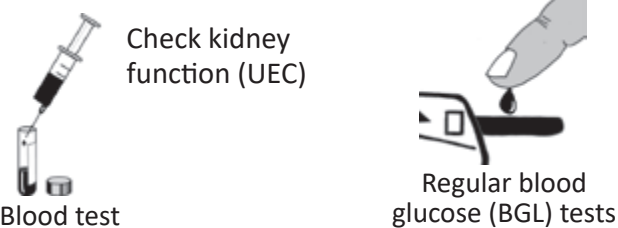
<p>Active ingredients (generic names)</p>	<p>CALCITRIOL (cal-cit-ree-ol) Common brands include: <i>Kosteo, Rocaltrol, Sical</i></p>  <p>Other vitamin D substances Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Colecalciferol • Ergocalciferol • Paricalcitol
<p>What it is used for</p>	<ul style="list-style-type: none"> • Low vitamin D levels, especially if chronic kidney disease • With calcium to treat weak bones
<p>How it works</p>	<ul style="list-style-type: none"> • Helps make bones stronger by increasing absorption of calcium and phosphate from intestines, and reducing loss from kidneys 
<p>Side effects</p>	<ul style="list-style-type: none"> • If level of calcium in blood is too high (hypercalcaemia) <ul style="list-style-type: none"> ◦ Frequent urination (peeing a lot) — early warning sign ◦ Other signs: <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Constipation</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Dry mouth</p> </div> <div style="text-align: center;">  <p>Sweating</p> </div> <div style="text-align: center;">  <p>Sleepy</p> </div> </div>




 <p>Warnings</p>	 <p>Kidney trouble</p> <p>Interactions — Do not use together without medical consult</p> <p>CALCITRIOL with:</p> <ul style="list-style-type: none"> • Calcium — needs careful monitoring • Digoxin — needs careful monitoring • Thiazide diuretics — need careful monitoring
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not take supplements that contain calcium or vitamin D unless prescribed by a doctor — risk of too much calcium (hypercalcaemia)  <p>Return to clinic if nausea, vomiting, constipation, headache, thirst or tiredness — signs of too much calcium</p> <p>Warning stickers (p298): 5</p>
<p>Check</p>	 <p>Check calcium and phosphate levels every 3 months</p> <p>Blood test</p>




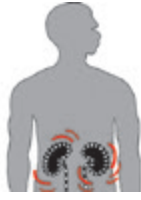




<p>Active ingredients (generic names)</p>	<p>CALCIUM CARBONATE (cal-see-um car-bo-nate) CALCIUM GLUCONATE (cal-see-um glue-co-nate)</p> <p>Other calcium salts Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Calcium chloride • Calcium citrate <p>Calcium combinations</p> <ul style="list-style-type: none"> • Calcium is in many vitamin supplements and antacids 	
<p>What it is used for</p>	<ul style="list-style-type: none"> • Calcium deficiency, osteoporosis, other bone diseases • Life threatening heart arrhythmias (eg patients who have missed dialysis) (calcium gluconate) (<i>CARPA STM p248</i>) • Magnesium overdose (eg when treating severe pre-eclampsia) (calcium gluconate) (<i>WBM p24</i>) • Reducing phosphate levels in chronic kidney disease (CKD) • Can be an ingredient in antacids 	
<p>How it works</p>	<ul style="list-style-type: none"> • Replaces calcium if deficient in body • Calcium binds to phosphate in stomach and stops it being absorbed by body. This reduces high phosphate levels 	
<p>Side effects</p>	<p> Wind – burping, farting</p> <ul style="list-style-type: none"> • If calcium in blood too high (hypercalcaemia) <ul style="list-style-type: none"> ◦ Passing urine more often than usual (frequency) ◦ Other signs: <p> Headache</p> <p> Dry mouth</p> <p> Constipation</p> <p> Sleepy</p> <p> Sweating</p> <p> Nausea</p>	






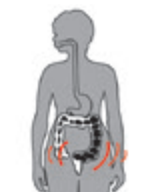

 <p>Warnings</p>	<p>Interactions — Do not use together without medical consult</p> <p>CALCIUM CARBONATE or CALCIUM GLUCONATE with:</p> <ul style="list-style-type: none"> • Digoxin — needs careful monitoring • Iron tablets, doxycycline, alendronate, sotalol, ciprofloxacin — can take 2 hours before or after calcium tablets • Thyroxine tablets — can take 4 hours before or after calcium tablets
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • If taking for kidney trouble and you skip a meal, skip calcium tablets too • If taking calcium for bone trouble <ul style="list-style-type: none"> ◦ Take at night (bedtime) so more will be absorbed into bones ◦ Tell doctor or health worker if you become pregnant or finish menopause as dose may need to be changed <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Take with food or milk</p> </div> <div style="text-align: center;">  <p>Return to clinic if nausea, vomiting, constipation, headache, thirst or tiredness – signs of too much calcium</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Tablets come in different forms — some can be chewed, some need to be swallowed whole, some are dissolved in water. Make sure person understands how to take theirs <div style="display: flex; justify-content: center; align-items: center; margin-top: 20px;">  <div style="margin-left: 20px;"> <p>Regular checks for calcium and phosphate levels</p> <p>Blood test</p> </div> </div>



<p>Active ingredients (generic names)</p>	<p>EXENATIDE (ex-en-a-tide) Common brands include: <i>Byetta, Bydureon</i></p> <p>LIRAGLUTIDE (lir-a-gloo-tide)  Common brands include: <i>Victoza</i></p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Type 2 diabetes (<i>CARPA STM p257</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Acts like (mimics) a hormone (GLP-1) that releases insulin into body after a meal, and slows down glucose absorption • Delays stomach emptying after a meal and reduces appetite
<p>Side effects</p>	<ul style="list-style-type: none"> • Low blood glucose <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center;">  <p>Diarrhoea</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Dizzy</p> </div> <div style="text-align: center;">  <p>Stomach trouble – pancreatitis</p> </div> </div>




 <p>Warnings</p>	 <p>Pregnant Breastfeeding Kidney trouble (exenatide) Stomach trouble (exenatide)</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult EXENATIDE or LIRAGLUTIDE with:</p> <ul style="list-style-type: none"> • Antibiotics — can take 1 hour before or 4 hours after exenatide • Other blood glucose lowering medicines — may increase risk of hypo (hypoglycaemia) <ul style="list-style-type: none"> • Exenatide <ul style="list-style-type: none"> ◦ Twice a day 30 minutes to 1 hour before main meals <ul style="list-style-type: none"> ▪ Make sure main meals are at least 6 hours apart ▪ Do not use after a meal ◦ <i>OR</i> once a week — talk with diabetes educator • Liraglutide — once a day  <p>Healthy food Exercise every day Take at same time every day (liraglutide)</p>
	<p>Warning stickers (p298): 6, 7b Exenatide also 10a Linaglutide also 21</p>
<p>Check</p>	<ul style="list-style-type: none"> • Are combined checks for chronic diseases up to date (<i>CARPA STM p239</i>)  <p>Blood test Check kidney function (UEC) Regular blood glucose (BGL) tests</p>









<p>Active ingredients (generic names)</p>	<p>LINAGLIPTIN (lin-a-glip-tin) Common brands include: <i>Trajenta</i></p> <p>SAXAGLIPTIN (sax-a-glip-tin) Common brands include: <i>Kombiglyze XR, Onglyza</i></p> <p>SITAGLIPTIN (si-ta-glip-tin) Common brands include: <i>Januvia</i></p> <p>VILDAGLIPTIN (vil-da-glip-tin) Common brands include: <i>Galvus</i></p>  <p>Common name: Gliptins</p> <p>DPP 4 combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Linagliptin + metformin (eg <i>Trajentamet</i>) • Sitagliptin + metformin (eg <i>Janumet, Janumet XR</i>) • Vildagliptin + metformin (eg <i>Galvumet</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Type 2 diabetes (<i>CARPA STM p257</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Increases concentration of a hormone (GLP-1) that releases insulin into body after a meal, slows down glucose absorption
<p>Side effects</p>	<ul style="list-style-type: none"> • Muscle pain  <p>Headache</p>  <p>Stomach trouble – pancreatitis</p>





 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Kidney trouble (not linagliptin)</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <p>GLIPTINS with</p> <ul style="list-style-type: none"> • ACE inhibitors — need to be closely monitored • Other blood glucose lowering medicines — may increase risk of hypo (hypoglycaemia)
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not take more than 1 aspirin tablet a day unless the doctor tells you to <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Healthy food</p> </div> <div style="text-align: center;">  <p>Exercise every day</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Take with food or milk – take combination tablets (+ metformin) with or after food or milk so medicine won't make you feel sick</p> </div>
	<p>Warning stickers (p298): 10a</p>
<p>Check</p>	<ul style="list-style-type: none"> • Are combined checks for chronic diseases up to date (CARPA STM p239)













<p>Active ingredients (generic names)</p>	<p>GLUCAGON (glue-ca-gon) Common brands include: <i>Glucagen Hypokit</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> Reversing low blood glucose <ul style="list-style-type: none"> Low blood glucose (hypoglycaemia) (<i>CARPA STM p91</i>) Low blood glucose in newborn babies (<i>WBM p78</i>)
<p>How it works</p>	<ul style="list-style-type: none"> Increases blood glucose by causing liver to make more glucose and slow digestion 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around;"> <div>  <p>Nausea and vomiting</p> </div> <div>  <p>Allergic reaction if swollen face and throat make it hard to breathe – think of allergy</p> </div> </div> <ul style="list-style-type: none"> Large doses of glucagon can lead to low blood potassium levels (hypokalaemia). This causes many of the side effects <ul style="list-style-type: none"> Muscle weakness (low potassium) Other signs: <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div>  <p>Sleepy</p> </div> <div>  <p>Constipation</p> </div> <div>  <p>Irregular pulse</p> </div> </div>







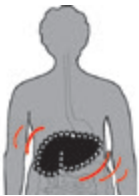
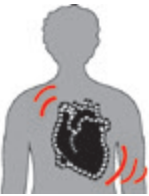
 <p>Warnings</p>	
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Make sure you always know where your glucagon is • Make sure any person who may need to give glucagon knows how and when to give it • It will take about 10 minutes for you to respond to the glucagon <ul style="list-style-type: none"> ◦ Have a light meal (eg sandwich or some stew) as soon as you can to stop the hypo coming back ◦ If they want more information — see <i>Low blood glucose (hypoglycaemia)</i> (CARPA STM p91)
<p>Check</p>	









<p>Active ingredients (generic names)</p>	<p>INSULIN (in-su-lin)</p> <ul style="list-style-type: none"> • INSULIN — LONG-ACTING or INTERMEDIATE (basal) Glargine (eg <i>Lantus</i>) Isophane (eg <i>Humulin NPH, Protaphane</i>), Detemir (eg <i>Levemir</i>) • INSULIN — SHORT or RAPID ACTING (bolus) Neutral (eg <i>Actrapid, Humulin</i>) Aspart (eg <i>NovoRapid</i>), Glulisine (eg <i>Apidra</i>), Lispro (eg <i>Humalog</i>) • INSULIN — MIXED (biphasic, basal-bolus) (eg <i>Humalog Mix 25, Humulin 30/70, Mixtard 30/70, NovoMix 30</i>)  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Many different forms of insulin. If you are not sure which form patient is taking — ask doctor or diabetes educator</p> </div>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Type 1 and Type 2 diabetes (CARPA STM p257) • Diabetes in pregnancy (WBM p124)
<p>How it works</p>	<ul style="list-style-type: none"> • Natural insulin is a hormone made by the pancreas <ul style="list-style-type: none"> ◦ Helps glucose in the blood enter body cells to be used as energy ◦ Helps store excess glucose in the liver or muscles • Insulin (medicine) replaces natural insulin and helps control blood glucose levels in people with diabetes <ul style="list-style-type: none"> ◦ In Type 1 diabetes — body doesn't make insulin ◦ In Type 2 diabetes — body is insulin resistant and doesn't make or use insulin well 
<p>Side effects</p>	 <p>Weight gain</p> <ul style="list-style-type: none"> • Blood glucose too low (hypoglycaemia or 'hypo') (CARPA STM p91) <ul style="list-style-type: none"> ◦ More likely to happen if person not eating enough food or dose too high ◦ Warning signs: sweating, hunger, shaking (tremor), confusion, loss of consciousness





 <p>Warnings</p>	<ul style="list-style-type: none"> • More insulin may be needed when person is sick (eg infection), even if not eating much  <p>Medical/diabetes educator consult if person has a hypo</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • A lot of medicines affect blood glucose and will affect how well insulin works — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> • Injections can be given in abdomen or thigh <ul style="list-style-type: none"> ◦ Injections in abdomen are more evenly absorbed ◦ Use different place each time to stop skin getting sore ◦ Use new needle each time, put old needle in sharps container • Pre-mixed and intermediate insulins — gently mix first • Rapid or short acting, or mixed insulin — eat after injection • If insulin not kept in fridge expiry date will be sooner, it won't work as well <ul style="list-style-type: none"> ◦ Take any left after 1 month back to clinic — it will be out of date <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Healthy food</p> </div> <div style="text-align: center;">  <p>Store in fridge (not freezer)</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog) – more likely to have a hypo, and less likely to know you are having one</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Exercise every day</p> </div> <p>Warning stickers (p298): 6 (except vial in use), 7b (28 days), 10a</p>
<p>Check</p>	<ul style="list-style-type: none"> • Are combined checks for chronic diseases up to date (CARPA STM p239) • Does patient or carer know how to give injection (see pamphlet inside insulin box or ask for advice) • Does patient (and carer, friends and family) know what to do if they have a hypo, and to come to clinic straight away if treatment doesn't work <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Regular blood glucose (BGL) tests</p> </div> </div>













<p>Active ingredients (generic names)</p>	<p>METFORMIN (met-for-min) Common brands include: <i>Diabex, Diaformin, Formet</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Type 2 diabetes — alone or in combination with other blood glucose controlling medicines (CARPA STM p257)
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces glucose made by liver and causes more glucose to be used in other tissues • Can take 2 weeks to start working 
<p>Side effects</p>	<ul style="list-style-type: none"> • Lactic acidosis — rare but serious. Occurs mainly in patients with kidney trouble or heart failure <ul style="list-style-type: none"> ◦ Early symptoms — stomach cramps, nausea, vomiting, losing weight, feeling really bad, loss of appetite • Body absorbs less vitamin B12 <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Nausea – worse if dose increased too quickly</p> </div> <div style="text-align: center;">  <p>Diarrhoea</p> </div> </div>







 <p>Warnings</p>	<ul style="list-style-type: none"> Severe illness or trauma <div style="display: flex; justify-content: space-around; text-align: center;"> <div>  <p>Pregnant</p> </div> <div>  <p>Old people</p> </div> <div>  <p>Heart failure</p> </div> </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 20px;"> <div>  <p>Kidney trouble</p> </div> <div>  <p>Liver trouble</p> </div> </div>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> A lot of medicines affect blood glucose and will affect how well metformin works — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> Do not take more than 1 aspirin tablet a day, unless the doctor tells you to You can cut tablets in half if they have a line on them — but do not cut, crush or chew slow-release tablets If you stop taking tablets for more than 2 weeks — talk to clinic about starting again slowly so it won't make you sick <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 20px;"> <div>  <p>Take with food or milk – so doesn't make you feel sick</p> </div> <div>  <p>Do not stop taking medicine suddenly</p> </div> </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 20px;"> <div>  <p>Do not drink alcohol (grog)</p> </div> <div>  <p>Healthy food</p> </div> <div>  <p>Exercise every day</p> </div> </div>
	<p>Warning stickers (p298): 10a, A, B</p>
<p>Check</p>	<ul style="list-style-type: none"> Are combined checks for chronic diseases up to date (<i>CARPA STM p239</i>)








<p>Active ingredients (generic names)</p>	<p>PIOGLITAZONE (pi-o-glit-a-zone) Common brands include: <i>Actos</i></p>  <p>Other glitazones Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Rosiglitazone
<p>What it is used for</p>	<ul style="list-style-type: none"> • Type 2 diabetes in combination with other blood glucose controlling medicines (CARPA STM p257)
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces glucose produced by liver and causes more glucose to be used in other tissues 
<p>Side effects</p>	<ul style="list-style-type: none"> • Muscle pain <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Weight gain</p> </div> <div style="text-align: center;">  <p>Swollen ankles</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Dizzy</p> </div> <div style="text-align: center;">  <p>Liver trouble – rare</p> </div> <div style="text-align: center;">  <p>Heart failure – rare</p> </div> </div>









 <p>Warnings</p>	 <p>Pregnant Breastfeeding Liver trouble Heart failure</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> A lot of medicines affect blood glucose and will affect how well glitazones work — always check with doctor or pharmacist before adding another medicine <p>• Do not take more than 1 aspirin a day unless the doctor tells you to</p>  <p>Healthy food</p>  <p>Exercise every day</p>   <p>Return to clinic straight away if you feel sick or get yellow eyes or dark urine (liver damage) OR if you get swollen ankles, fatigue, weight gain or breathlessness (heart failure)</p> <p>Warning stickers (p298): 10a</p>
<p>Check</p>	<ul style="list-style-type: none"> Are combined checks for chronic diseases up to date (<i>CARPA STM p239</i>)  <p>Check liver function tests (LFT) every 2 months for first year</p> <p>Blood test</p>










<p>Active ingredients (generic names)</p>	<p>GLICLAZIDE (glick-laz-ide) Common brands include: <i>Diamicron, Glyade, Nidem</i></p> <p>GLIMEPIRIDE (gli-mep-ir-ide) Common brands include: <i>Amaryl, Diapride, Dimirel</i></p>   <p>Other sulfonylureas Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Glibenclamide • Glipizide
<p>What it is used for</p>	<ul style="list-style-type: none"> • Type 2 diabetes (CARPA STM p257)
<p>How it works</p>	<ul style="list-style-type: none"> • Increases release of natural insulin from pancreas to help cells use glucose. This helps to control blood glucose levels in people with diabetes 
<p>Side effects</p>	<ul style="list-style-type: none"> • Blood glucose too low (hypoglycaemia or 'hypo') (CARPA STM p91) <ul style="list-style-type: none"> ◦ More likely to happen if patient is not eating enough food or dose too high ◦ Warning signs — sweating, hunger, shaking (tremor), confusion, loss of consciousness  <p>Weight gain</p>



 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Kidney trouble – may need lower dose</p> </div> <div style="text-align: center;">  <p>Medical/diabetes educator consult if person has a hypo</p> </div> </div>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> A lot of medicines affect blood glucose and will affect how well sulfonylureas work — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> Do not take more than 1 aspirin tablet a day unless doctor tells you to What to do if they have a hypo, and to come to clinic straight away if treatment doesn't work <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Take with food or milk – to avoid hypo</p> </div> <div style="text-align: center;">  <p>Exercise every day</p> </div> <div style="text-align: center;">  <p>Healthy food</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog) – more likely to have a hypo, and less likely to know you are having one</p> </div> </div>
	<p>Warning stickers (p298): Gliclazide 10a, A, B Glimepiride 10a, F</p>
<p>Check</p>	<ul style="list-style-type: none"> Are combined checks for chronic diseases up to date (CARPA STM p239) <div style="display: flex; align-items: center; margin-top: 10px;">  <p>Regular blood glucose (BGL) tests</p> </div>





<p>Active ingredients (generic names)</p>	<p>THYROXINE (thi-rox-een) Common brands include: <i>Eutroxig, Oroxine</i></p>  <p>Other thyroid hormones Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Liothyronine
<p>What it is used for</p>	<ul style="list-style-type: none"> • Thyroid hormone too low (hypothyroidism) • Thyroid gland not working properly or has been removed, or partly removed
<p>How it works</p>	<ul style="list-style-type: none"> • Replaces thyroid hormones when not enough in body <ul style="list-style-type: none"> ◦ Thyroid hormones help many parts of body grow and work properly 
<p>Side effects</p>	<ul style="list-style-type: none"> • Dose can be reduced if signs of too much thyroid hormone (hyperthyroidism) — overdose • Signs of overdose <ul style="list-style-type: none"> ◦ Weight loss ◦ Other signs: <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Fast pulse (heart rate)</p> </div> <div style="text-align: center;">  <p>Sweating</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Diarrhoea</p> </div> <div style="text-align: center;">  <p>Trouble sleeping</p> </div> </div>




 <p>Warnings</p>	<ul style="list-style-type: none"> • Dose often needs to be adjusted (depending on symptoms)  <p>Heart trouble</p> <p>Interactions — Do not use together without medical consult</p> <p>THYROXINE with:</p> <ul style="list-style-type: none"> • Antiepileptics • Ciprofloxacin — can take 6 hours before or after thyroxine • Digoxin • Iron + calcium, antacids — can take 4 hours before or after thyroxine • Proton pump inhibitors • Warfarin
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Can take up to 6 weeks to work • Will need regular blood tests especially when starting and to get dose right • For infants or young children — mix crushed tablet in spoonful of water or milk (not soy milk) • If not kept in fridge use-by/expiry date will be sooner, it won't work as well <ul style="list-style-type: none"> ◦ 1 strip can be kept out of fridge or in dose aid for up to 2 weeks <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Store in fridge (not freezer)</p> </div> <div style="text-align: center;">  <p>Take on empty stomach – usually before breakfast</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine – take as instructed to stop symptoms coming back</p> </div> </div>
<p>Warning stickers (p298): 3b, 4a, 6</p>	
<p>Check</p>	 <p>Thyroid function 6 weeks after changing dose, then once a year when stable</p> <p>Blood test</p>






<p>Active ingredients (generic names)</p>	<p>ACETAZOLAMIDE (a-seet-a-zole-a-mide) Common brands include: <i>Diamox, Glaucox</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Acute glaucoma (CARPA STM p353)
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces eye (intraocular) pressure by reducing production of fluid (aqueous humour) in the eye 
<p>Side effects</p>	<ul style="list-style-type: none"> • Tingling (paraesthesia) in hands, face, feet • Problems with sex (eg low sex drive) • Bitter or metallic taste • Metabolic acidosis, changes in body salts (electrolytes)  <p>Sleepy</p>  <p>Depression</p>  <p>Diarrhoea</p>  <p>Nausea and vomiting</p>  <p>Abdominal pain</p>  <p>Kidney trouble – kidney stones</p>



 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Kidney trouble – use lower dose</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Gout</p> </div> </div>
 <p>Tell the patient</p>	<div style="text-align: center;">  </div> <p>Take tablet with food or milk – so it doesn't make you feel sick</p>
<p>Check</p>	<p>Warning stickers (p298): 10a, 12, B</p>








<p>Active ingredients (generic names)</p>	<p>KETOTIFEN (key-to-tif-fen) Common brands include: <i>Zaditen</i></p> <p>OLOPATADINE (oh-loe-pa-ta-deen) Common brands include: <i>Patanol</i></p>  <p>Other antihistamines (eye) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Azelastine • Levocabastine
<p>What it is used for</p>	<ul style="list-style-type: none"> • Allergic conjunctivitis (<i>CARPA STM p348</i>) • Fly bite (<i>CARPA STM p351</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Histamines produced by the body cause most allergy symptoms. Antihistamines can <ul style="list-style-type: none"> ◦ Block the action of histamine by binding to histamine receptors. Ketotifen and olopatadine bind to H₁ receptors (selective H₁ antagonists) ◦ Stabilising the mast cells that produce histamines — reducing the amount of histamine released
<p>Side effects</p>	<ul style="list-style-type: none"> • Mild eye irritation, stinging when put in • Dry eye (olopatadine) • Engorgement or inflammation of the eye (olopatadine)  <p>Headache</p>



 <p>Warnings</p>	 <p>Children under 3 years</p> <p>Interactions — Do not use together without medical consult ANTIHISTAMINES (eye) with:</p> <ul style="list-style-type: none"> • Vasoconstrictor eye drops
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May sting when first put in • Only use 1 drop  <p>Give eye drops – don't touch eye with nozzle</p>
<p>Check</p>	








<p>Active ingredients (generic names)</p>	<p>APRACLONIDINE (a-pra-clar-ni-deen) Common brands include: <i>lopidine</i></p>  <p>Other alpha₂ agonists Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Brimonidine (eye)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Glaucoma <ul style="list-style-type: none"> ◦ Acute (<i>CARPA STM p353</i>) ◦ Chronic
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces eye (intraocular) pressure by reducing production and increasing outflow of fluid (aqueous humour) in eye 
<p>Side effects</p>	 <p>Eye irritation</p> <ul style="list-style-type: none"> • Dry mouth and nose • Taste disturbance




 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Heart trouble</p> </div> </div>
 <p>Tell the patient</p>	 <p>Give eye drops – don't touch eye with nozzle</p>
<p>Check</p>	







<p>Active ingredients (generic names)</p>	<p>CHLORAMPHENICOL (clor-am-fen-i-col) Common brands include: <i>Chlorsig</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Eye infections — pus in eyes and eyelids stuck together in morning <ul style="list-style-type: none"> ◦ Bacterial conjunctivitis (CARPA STM p348) ◦ Eye surface ulcer or infection (CARPA STM p349) • Prevent eye infections if <ul style="list-style-type: none"> ◦ Eye damaged ◦ Something in eye (CARPA STM p354) ◦ Flash burn (CARPA STM p357)
<p>How it works</p>	<ul style="list-style-type: none"> • Kills bacteria that causes some common eye infections • Can be used as drops or ointment 
<p>Side effects</p>	<ul style="list-style-type: none"> • Bad taste if drops run into back of mouth • Ointment can sting — need to close eyes for 5 minutes



 <p>Warnings</p>	 <p>Medical consult if infection only in one eye <i>OR</i> if not better at end of usual treatment time</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not use on other people, you might give them your infection <div style="display: flex; justify-content: space-around;"> <div>  <p>Take back to clinic after 1 month – will be out of date</p> </div> <div>  <p>Return to clinic if not better at end of treatment time</p> </div> </div> <ul style="list-style-type: none"> • Drops <ul style="list-style-type: none"> ◦ Only use 1 drop ◦ Press inside corner of eye to stop drops running into mouth so you don't get bad taste <div>  <p>Give eye drops – don't touch eye with nozzle</p> </div> <ul style="list-style-type: none"> • Ointment <ul style="list-style-type: none"> ◦ Lasts longer but can make vision blurry for a short time <div>  <p>Pull bottom eyelid down and put thin layer of ointment along the inside. Don't touch eye with nozzle</p> </div> <p>Apply eye ointment</p>
<p>Check</p>	<p>Warning stickers (p298): 7b</p> <ul style="list-style-type: none"> • Follow-up when treatment finished to make sure infection is gone. If not — medical consult




<p>Active ingredients (generic names)</p>	<p>DEXAMETHASONE (dex-a-meth-a-sonē) Common brands include: <i>Maxidex</i></p> <p>PREDNISOLONE 1% + PHENYLEPHRINE 0.12% (pred-nis-o-lone + fen-al-ef-rine) Common brands include: <i>Prednefrin Forte</i></p>  <p>Other corticosteroids (eye) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Fluorometholone • Hydrocortisone (eye) • Prednisolone (eye)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Acute glaucoma (<i>CARPA STM p353</i>) • Allergic and inflammatory conditions of the eye
<p>How it works</p>	<ul style="list-style-type: none"> • Corticosteroid reduces body's inflammatory response, reducing pain and swelling • Vasoconstrictor (phenylephrine) narrows small blood vessels in eye, reduces redness and pain 
<p>Side effects</p>	<ul style="list-style-type: none"> • Eye damage can occur with longer term use <ul style="list-style-type: none"> ◦ Do not use for more than 2 weeks without supervision by ophthalmologist



 <p>Warnings</p>	<ul style="list-style-type: none"> • Person wears contact lenses <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Pregnant – if needed for more than 5 days (phenylephrine)</p> </div> <div style="text-align: center;">  <p>Babies under 6 months (prednisolone 1% + phenylephrine 0.12%)</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Children (dexamethasone)</p> </div> <div style="text-align: center;">  <p>Eye trouble – infection</p> </div> </div>
 <p>Tell the patient</p>	 <p>Give eye drops – don't touch eye with nozzle</p>
<p>Check</p>	





<p>Active ingredients (generic names)</p>	<p>EYE LUBRICANTS (loo-bri-cants) Common brands include: <i>Methopt, Poly-Tears, Polyvisc</i></p>  <p>Common name: artificial tears</p> <div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> • Lubricant drops may contain: carmellose, hypromellose, hydroxyethylcellulose, polyvinyl alcohol, polyethylene glycol, propylene glycol, sodium hyaluronate • Ointments may contain: paraffin, wool fat (lanolin) </div>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Conjunctivitis — allergic and viral (CARPA STM p348) • Dry eye (CARPA STM p346) • Fly bite (CARPA STM p351) • Mild eye irritation (eg dust)
<p>How it works</p>	<ul style="list-style-type: none"> • Works like tears to soothe dry eyes 
<p>Side effects</p>	 <p>Eye irritation – if allergic to preservative in drops or ointment</p>



 <p>Warnings</p>	<ul style="list-style-type: none"> Consider cause of sore eyes — damage, infection, chronic disease, medicines (eg benztropine, ipratropium)  <p>Medical consult if needed for more than a short time</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> Do not share with other people. If you have an infection you will pass it on Use as often as needed  <p>Give eye drops – don't touch eye with nozzle</p>  <p>Take back to clinic after 1 month – will be out of date</p>  <p>Return to clinic if needed for more than a short time</p>
	<p>Warning stickers (p298): 7a or 7b</p>
<p>Check</p>	<ul style="list-style-type: none"> Check for cause of irritation — see <i>Warnings (above)</i>








<p>Active ingredients (generic names)</p>	<p>FLUORESCEIN (floor-res-sin) Common brands include: <i>Fluorets, Minims fluorescein sodium eye drops</i></p>  <p>Other stains (eye) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Lissamine green • Rose bengal <p>Local anaesthetic and stain combinations (eye) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Lidocaine (lignocaine) + fluorescein
<p>What it is used for</p>	<ul style="list-style-type: none"> • Finding damage on eye surface (<i>CPM p154</i>) <ul style="list-style-type: none"> ◦ Dry eye (<i>CARPA STM p346</i>) ◦ Eye assessment (<i>CARPA STM p343</i>) ◦ Ulcers or infection (<i>CARPA STM p349</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Colours damaged or injured parts of eye surface so they can be seen 
<p>Side effects</p>	<ul style="list-style-type: none"> • Skin around eye may go yellow, but this washes off • Nasal discharge or tears may change colour





 <p>Warnings</p>	<ul style="list-style-type: none"> • Soft contact lenses may be stained  <p>Only use in clinic – do not give to person to use at home</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Might sting when drops go in • Has no effect apart from helping to see damage
<p>Check</p>	


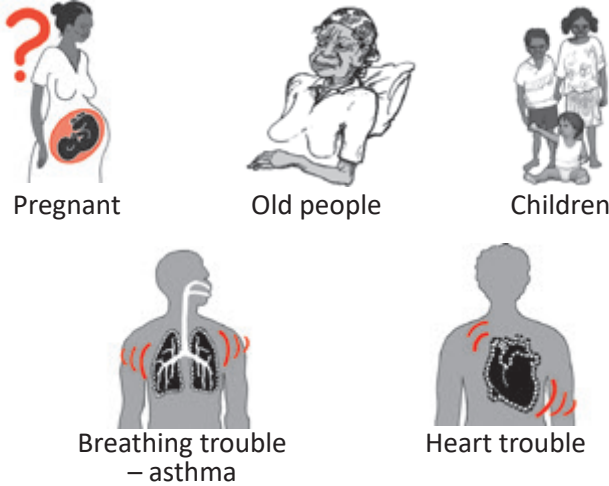


<p>Active ingredients (generic names)</p>	<p>OXYBUPROCAINE (oxy-bu-pro-cane) Common brands include: <i>Minims benoxinate, Minims oxyburprocaine</i></p> <p>TETRACAINE (AMETHOCAINE) (tet-ra-cane [a-meth-o-cane]) Common brands include: <i>Minims amethocaine, Minims tetracaine</i></p>  <p>Other local anaesthetics (eye) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Proxymetacaine
<p>What it is used for</p>	<ul style="list-style-type: none"> • Numbing the eye to <ul style="list-style-type: none"> ◦ Check for injury (<i>CARPA STM p344</i>) ◦ Do double eversion of eyelid (<i>CPM p153</i>) ◦ Examine flash burns (<i>CARPA STM p357</i>) ◦ Remove foreign body (<i>CPM p154</i>) ◦ Wash out burning chemical (<i>CPM p151</i>) • Removing tick from ear (<i>CPM p275</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Blocks nerves in eye so pain messages can't be sent to brain 
<p>Side effects</p>	<ul style="list-style-type: none"> • Tiny ulcers (sores) on eyes if used too much





 <p>Warnings</p>	 <p>Only use in clinic – do not give to person to use at home</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Stings when first put in. Close eyes for a little while • Do not go outside until effects wear off to prevent damage to eye (10–20 minutes) <ul style="list-style-type: none"> ◦ If not able to stay in clinic — cover with pad (<i>CPM p156</i>)  <p>Do not rub eyes after drops put in</p>
<p>Check</p>	









<p>Active ingredients (generic names)</p>	<p>NAPHAZOLINE (na-faz-o-leen) Common brands include: <i>Albalon, Naphcon, Visine</i></p>  <p>Other vasoconstrictors/decongestants (eye) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Phenylephrine • Tetrahydrozoline (tetryzoline) <p>Decongestant & antihistamine (eye) combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Naphazoline + antazoline (eg <i>Albalon-A</i>) • Naphazoline + pheniramine (eg <i>Naphcon-A, Visine Allergy with Antihistamine</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Allergic reaction to pollens, smoke, dust, insect bites (with antihistamine) • Sore, red, itchy eyes with no pus
<p>How it works</p>	<ul style="list-style-type: none"> • Narrows small blood vessels in eye, reduces redness and pain 
<p>Side effects</p>	<ul style="list-style-type: none"> • Stinging when drops put in • Redness may come back after drops wear off





 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use eye decongestant for more than 5 days <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Children under 6 years</p> </div> <div style="text-align: center;">  <p>Medical consult if eyes no better after 2 days</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May sting when drops go in • Only use 1 drop <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Give eye drops – don't touch eye with nozzle</p> </div> <div style="text-align: center;">  <p>Take back to clinic after 1 month – will be out of date</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic if needed for more than 5 days</p> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Is eye infected • Is something (foreign body) in eye (<i>CARPA STM p354</i>) causing irritation









<p>Active ingredients (generic names)</p>	<p>TIMOLOL (tim-ol-ol) Common brands include: <i>Nygel, Tenopt, Timoptol</i></p>  <p>Other beta-blockers (eye) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Betaxolol
<p>What it is used for</p>	<ul style="list-style-type: none"> • Acute glaucoma (CARPA STM p353) • High BP (hypertension) in the eye
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces production of fluid (aqueous humour) in eye 
<p>Side effects</p>	<ul style="list-style-type: none"> • Stinging when drops put in <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Slow pulse (heart rate)</p> </div> <div style="text-align: center;">  <p>Blurred vision</p> </div> </div>






 <p>Warnings</p>	 <p>Pregnant Old people Children</p> <p>Breathing trouble – asthma Heart trouble</p>
	<p>Interactions — Do not use together without medical consult</p> <p>TIMOLOL with:</p> <ul style="list-style-type: none"> • Adrenaline • Beta₂ agonists • Beta-blockers (oral) • Clonidine • Ergometrine • Isoprenaline • NSAIDs – low dose aspirin OK • Verapamil
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May sting when drops go in • Store gel drops upside down so bubbles don't form when applied  <p>Give eye drops – don't touch eye with nozzle</p>
<p>Check</p>	



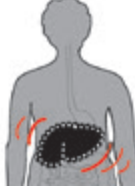





<p>Active ingredients (generic names)</p>	<p>ANTACIDS (ant-as-ids) Common brands include: <i>Gastrogel, Gaviscon, Mylanta</i></p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Usually combinations of aluminium hydroxide, calcium carbonate, magnesium hydroxide.</p> </div>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Eases pain of stomach upset <ul style="list-style-type: none"> ◦ Gastritis, reflux, indigestion (CARPA STM p21) ◦ Heartburn in pregnancy (WBM p116) ◦ Stomach ulcers
<p>How it works</p>	<ul style="list-style-type: none"> • Neutralises stomach acid to prevent pain if stomach acid comes back up oesophagus 
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually none if taken for short time <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Constipation (if a lot of aluminium or calcium)</p> </div> <div style="text-align: center;">  <p>Diarrhoea (if a lot of magnesium)</p> </div> </div>







 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Kidney trouble (antacids with sodium)</p> </div> <div style="text-align: center;">  <p>Liver trouble (antacids with sodium)</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Heart failure – do not use antacids with sodium</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a short time</p> </div> </div>
	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Antacids should not be taken at same time as other oral medicines. Leave 2 hours between taking an antacid and another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Only use when you have symptoms • Take between meals and at bedtime, or when needed • Shake bottle before taking mixture • Tablets need to be chewed before swallowing <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Do not drink alcohol (grog) – makes symptoms worse</p> </div> <div style="text-align: center;">  <p>Return to clinic if not getting better OR symptoms come back</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Check for underlying problem (eg heart trouble, stomach ulcer)












<p>Active ingredients (generic names)</p>	<p>DOCUSATE (doc-u-sate) Common brands include: <i>Coloxyl</i></p> <p>POLOXAMER (pol-ox-a-mer) Common brands include: <i>Coloxyl drops</i></p> <p>DOCUSATE + SENNA (doc-u-sate + sen-na) Common brands include: <i>Coloxyl and Senna</i></p>  <p>Other faeces softeners Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Liquid paraffin
<p>What it is used for</p>	<ul style="list-style-type: none"> • Constipation caused by some medicines <ul style="list-style-type: none"> ◦ Opioids ◦ Palliative care medicines (<i>CPM p135</i>) • Postnatal constipation (<i>WBM p197</i>) • Preventing straining following rectal surgery and in acute perianal disease
<p>How it works</p>	<ul style="list-style-type: none"> • Softens faeces by gathering moisture from body into bowels 
<p>Side effects</p>	<ul style="list-style-type: none"> • Excessive loss of body salts (electrolytes)  <p>Abdominal pain</p>  <p>Diarrhoea – if dose too high</p>




 <p>Warnings</p>	<ul style="list-style-type: none"> • Use for short time only • Seek help with diet if constipated for a long time <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Dehydration</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a short time</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Takes 1–3 days to work when taken orally, 5–20 minutes to work when given rectally <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Children under 3 years – use poloxamer (<i>Coloxyl Drops</i>)</p> </div> <div style="text-align: center;">  <p>Return to clinic if needed for more than a short time</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Drink lots of water – helps stop constipation</p> </div> <div style="text-align: center;">  <p>Healthy food – eat plenty of fruits and vegetables to help stop constipation</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Check for cause of constipation


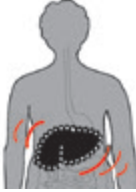



<p>Active ingredients (generic names)</p>	<p>LOPERAMIDE (lo-per-a-mide) Common brands include: <i>Gastro-Stop, Imodium, Lopedium</i></p>  <p>Other opioid antidiarrhoeals Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Codeine • Diphenoxylate
<p>What it is used for</p>	<ul style="list-style-type: none"> • Stopping diarrhoea in adults <ul style="list-style-type: none"> ◦ Alcohol withdrawal (<i>CARPA STM p211</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Slows down gastrointestinal movements and increases absorption of fluid from the bowel into the body 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Abdominal pain</p> </div> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Constipation</p> </div> </div>



 <p>Warnings</p>	<ul style="list-style-type: none"> Intestinal obstruction (blocked bowel or gut) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Children – use ORS (<i>p204</i>)</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Medical consult straight away if large fluid loss <i>OR</i> person can't tolerate fluid replacement</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a few days – may be another problem</p> </div> </div>
 <p>Tell the patient</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Return to clinic if needed for more than a short time</p> </div> <div style="text-align: center;">  <p>Drink lots of water</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> Does person have signs of dehydration (<i>CARPA STM p166</i>) Check for cause of diarrhoea






<p>Active ingredients (generic names)</p>	<p>METOCLOPRAMIDE (me-to-clo-pra-mide) Common brands include: <i>Maxolon, Pramin</i></p> <p>PROCHLORPERAZINE (pro-chlor-per-a-zeen) Common brands include: <i>Prozine, Stemetil, Stemzine</i></p>  <p>Other dopamine antagonists Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Domperidone • Droperidol • Haloperidol
<p>What it is used for</p>	<ul style="list-style-type: none"> • Increasing gastrointestinal movement after operations • Nausea and vomiting (adult) (CARPA STM p105) <p>Metoclopramide</p> <ul style="list-style-type: none"> • Nausea and vomiting (adult) with: opioid withdrawal (CARPA STM p222), palliative care (CPM p135), pregnancy (WBM p115) <p>Procholperazine</p> <ul style="list-style-type: none"> • Dizziness and vertigo <p>Doses — CARPA STM p105</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Acts on dopamine hormone receptors in brain and gut to reduce nausea and vomiting and increase gastrointestinal movement 
<p>Side effects</p>	<ul style="list-style-type: none"> • Restlessness • Agitation • Muscle spasm • Oculogyric crisis (CARPA STM p106)  <p>Headache (metoclopramide)</p>  <p>Dizzy (metoclopramide)</p>  <p>Sleepy</p>  <p>Constipation</p>



 <p>Warnings</p>	<ul style="list-style-type: none"> • People with Parkinson's disease <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Children</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Kidney trouble (metoclopramide)</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Dehydration – may need ORS (p204)</p> </div> <div style="text-align: center;">  <p>Depression</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a short time</p> </div> </div>
 <p>Tell the patient</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div> <div style="text-align: center;">  <p>Drink lots of water</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic if still sick in 1–2 days</p> </div>
	<p>Warning stickers (p298): Metoclopramide 12 Prochlorperazine 1, 13, 16</p>
<p>Check</p>	<ul style="list-style-type: none"> • Does patient have signs of dehydration (CARPA STM p166) • Check for cause of vomiting







<p>Active ingredients (generic names)</p>	<p>OMEPRAZOLE (o-mep-ra-zol) Common brands include: <i>Acimax, Losec, Probitor</i></p>  <p>Other proton pump inhibitors (PPIs) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Esomeprazole • Lansoprazole • Pantoprazole • Rabeprazole
<p>What it is used for</p>	<ul style="list-style-type: none"> • Pain from stomach upset <ul style="list-style-type: none"> ◦ Gastritis, reflux, indigestion (<i>CARPA STM p21</i>) ◦ Stomach ulcers • Preventing stomach irritation caused by taking NSAIDs (<i>p222</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Stomach makes acid to help digest food. Acid can irritate stomach lining. PPIs reduce amount of acid in stomach 
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually none for first 2 months  <p>Headache Nausea Diarrhoea</p>



 <p>Warnings</p>	 <p>Liver trouble – with higher doses</p>  <p>Medical consult if needed for more than a few days – may be another problem (eg heart trouble)</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <p>OMEPRAZOLE with:</p> <ul style="list-style-type: none"> • Clopidogrel • Diazepam • Warfarin <p>• Swallow tablets whole. Do not crush or chew</p>  <p>Return to clinic if needed for more than 1–2 months</p>
<p>Check</p>	<p>Warning stickers (p298): 13, A</p> <ul style="list-style-type: none"> • Does person still need it after taking it for long time






<p>Active ingredients (generic names)</p>	<p>ONDANSETRON (on-dan-set-ron) Common brands include: <i>Ondaz, Onsetron, Zofran</i></p>  <p>Other 5HT3 antagonists Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Granisetron • Palonosetron • Tropisetron
<p>What it is used for</p>	<ul style="list-style-type: none"> • Nausea and vomiting (<i>CARPA STM p105</i>) • Persistent vomiting with diarrhoea (children) (<i>CARPA STM p170</i>) <p>Doses — <i>CARPA STM p441, WBM p381</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Stops nausea and vomiting by blocking central and peripheral 5HT3 receptors (a type of serotonin receptor)
<p>Side effects</p>	 <p>Constipation Headache Dizzy</p>


 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Breastfeeding – OK for 1–2 doses</p> </div> <div style="text-align: center;">  <p>Children under 2 years</p> </div> <div style="text-align: center;">  <p>Liver trouble – use lower dose</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <p>ONDANSETRON with:</p> <ul style="list-style-type: none"> • Apomorphine • Rifampicin • Tramadol — reduces analgesic effect of tramadol
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • If too nauseous to swallow tablets or medicine mixture — dissolve wafer on the tongue
<p>Check</p>	<ul style="list-style-type: none"> • For cause of nausea







<p>Active ingredients (generic names)</p>	<p>ORAL REHYDRATION SALTS Common brands include: <i>Gastrolyte, Hydralyte, Restore ORS</i></p>  <p>Common name: ORS</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Replacing fluid, body salts (electrolytes), glucose lost when person at risk of or dehydrated due to <ul style="list-style-type: none"> ◦ Diarrhoea (<i>CARPA STM p169</i>) ◦ Vomiting ◦ Sweating a lot
<p>How it works</p>	<ul style="list-style-type: none"> • Provides replacement fluid, body salts (electrolytes), glucose 
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually none if taken for short time







 <p>Warnings</p>	 <p>Children – watch for signs of dehydration</p>  <p>Medical consult straight away if large fluid loss <i>OR</i> person can't tolerate fluid replacement</p>  <p>Medical consult if needed for more than a few days – may be another problem</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Important to measure right amount of clean drinking water before mixing <ul style="list-style-type: none"> ◦ Usually 2 tablets or 1 sachet in 200mL of water • Children may take ORS better if frozen and given as an ice block
<p>Check</p>	<ul style="list-style-type: none"> • Dose given according to body weight and severity of diarrhoea <ul style="list-style-type: none"> ◦ For children under 5 see <i>Doses</i> (CARPA STM p169)  <p>Mix sachet or tablets with right amount of water before use</p> <p>Making ORS</p>










<p>Active ingredients (generic names)</p>	<p>RANITIDINE (ra-ni-ti-deen) Brand names: <i>Ausran, Rani 2, Zantac</i></p>  <p>Other H₂ antagonists Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Cimetidine • Famotidine • Nizatidine
<p>What it is used for</p>	<ul style="list-style-type: none"> • Pain of stomach upset <ul style="list-style-type: none"> ◦ Heartburn, indigestion in pregnancy (WBM p116) • Stomach ulcer
<p>How it works</p>	<ul style="list-style-type: none"> • The stomach makes acid to help digest food. Acid can sometimes irritate stomach lining. H₂ antagonists reduce the secretion of acid in the stomach 
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually none if taken for short time




 <p>Warnings</p>	 <p>Medical consult if needed for more than a few days – may be another problem (eg heart trouble)</p>
 <p>Tell the patient</p>	 <p>Do not drink alcohol (grog) – makes symptoms worse</p>  <p>Return to clinic if not getting better <i>OR</i> symptoms come back</p>
<p>Check</p>	<ul style="list-style-type: none"> • Does person still need it after taking for a long time • Investigate reason for using



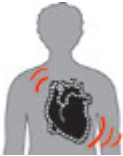







<p>Active ingredients (generic names)</p>	<p>TOPICAL ANORECTAL (a-no-rec-tal) Common brands include: <i>Anusol, Proctosedyl, Rectinol</i></p>  <p>May contain combinations of adrenaline (epinephrine), aluminium acetate, allantoin, balsam peru, benzocaine, cinchocaine, lidocaine (lignocaine), hydrocortisone, prednisolone, zinc oxide, benzyl benzoate.</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Relieving pain and bleeding of haemorrhoids (piles) • Inflammation or itchiness around anus • Tear or split in lining of anus (fissure)
<p>How it works</p>	<ul style="list-style-type: none"> • Contains local anaesthetic and corticosteroids to stop pain, adrenaline (epinephrine) to help stop small blood vessels bleeding, ingredients to soothe skin
<p>Side effects</p>	<ul style="list-style-type: none"> • May cause redness and irritation


 <p>Warnings</p>	<ul style="list-style-type: none"> • Itching around anus could be caused by threadworms  <p>Medical consult if needed for more than a short time</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Preventing constipation will help stop you straining when you go to the toilet. Straining causes haemorrhoids and makes them worse (painful or bleeding) <ul style="list-style-type: none"> ◦ Drink lots of water and eat lots of fibre • Use faeces softener if needed (eg docusate p194) • Keep area clean <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Drink lots of water – helps stop constipation</p> </div> <div style="text-align: center;">  <p>Healthy food – eat plenty of fruits and vegetables to help stop constipation</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic if you need to use for more than a short time <i>OR</i> symptoms come back</p> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Does person need treatment for worms or constipation












<p>Active ingredients (generic names)</p>	<p>SILDENAFIL (sil-den-a-fil) Common brands include: <i>Sildenafil, Viagra Revatio</i> TADALAFIL (ta-dal-a-fil) Common brands include: <i>Cialis</i> VARDENAFIL (var-den-a-fil) Common brands include: <i>Levitra</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Erectile dysfunction • Pulmonary arterial hypertension (sildenafil)
<p>How it works</p>	<ul style="list-style-type: none"> • Chemical messengers increase flow of blood to penis during sexual stimulation and cause an erection. This medicine helps stops these messengers breaking down so that they work better to help erection • Helps open up blood vessels in lungs to reduce pressure in pulmonary hypertension 
<p>Side effects</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Rash</p> </div> <div style="text-align: center;">  <p>Flushing</p> </div> <div style="text-align: center;">  <p>Dizzy</p> </div> </div>


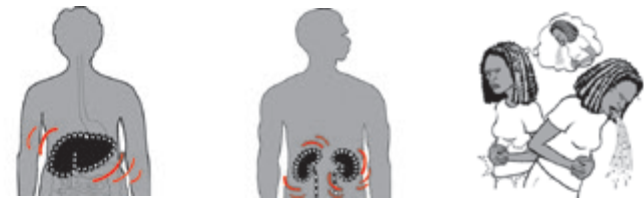
 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Old people – start with low dose</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Eye trouble</p> </div> <div style="text-align: center;">  <p>Heart failure</p> </div> </div> <p>Interactions — Do not use together without medical consult SILDENAFIL, TADALAFIL, VARDENAFIL with:</p> <ul style="list-style-type: none"> • Nitrates • Some medicines that lower BP (eg prazosin, tamsulosin, terazosin) <ul style="list-style-type: none"> ◦ Can take 4 hours before or after sildenafil, tadalafil ◦ Can take 6 hours before or after vardenafil
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Take sildenafil about 1 hour before you want it to work. May take longer to work if you take it with food • Take vardenafil 30–60 minutes before you want it to work • Take tadalafil 30 minutes to 12 hours before you want it to work • If taking sildenafil for pulmonary hypertension — must take it regularly as directed <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if dizzy or blurred vision</p> </div> <div style="text-align: center;">  <p>Return to clinic straight away if you can't see or hear properly</p> </div> </div>
	<p>Warning stickers (p298): 5, 16</p>
<p>Check</p>	<ul style="list-style-type: none"> • Does patient have any heart problems








<p>Active ingredients (generic names)</p>	<p>URINARY ALKALINISERS (ur-in-ary alk-al-in-i-sers) Common brands include: <i>Citravesent, Ural, Uricalm</i></p>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>May contain combinations of citric acid, tartaric acid, sodium bicarbonate, sodium citrate, sweetener.</p> </div>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Relieving burning from infections of kidney, bladder, urine • Some types of kidney stones
<p>How it works</p>	<ul style="list-style-type: none"> • Decreases levels of acid in urine and relieves pain, burning and discomfort of urinary tract infections (UTIs) or infections of kidney or bladder • Doesn't kill bacteria that causes infection, but can help prevent UTIs 
<p>Side effects</p>	 <p>Diarrhoea</p>






 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Kidney trouble – do not use if fluid or salt overload a problem</p> </div> <div style="text-align: center;">  <p>Heart failure – do not use if fluid or salt overload a problem</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>High BP – do not use if fluid or salt overload a problem</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a short time</p> </div> </div>
<p>Interactions — Do not use together without medical consult</p> <p>URINARY ALKALINISERS with:</p> <ul style="list-style-type: none"> Nitrofurantoin 	
 <p>Tell the patient</p>	<ul style="list-style-type: none"> May make you pee more often <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Sachet – mix with glass of water before use</p> </div> <div style="text-align: center;">  <p>Return to clinic if needed for more than a short time</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> Test for diabetes if person gets lots of UTIs Check for signs of fluid or salt overload <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>BP</p> </div> <div style="text-align: center;">  <p>Weight</p> </div> </div>












<p>Active ingredients (generic names)</p>	<p>DEXAMETHASONE (deks-a-meth-a-sonē) Common brands include: <i>Dexamethasone</i></p> <p>HYDROCORTISONE (hy-dro-cor-ti-zone) Common brands include: <i>Solu-Cortef</i></p> <p>PREDNISOLONE (pred-nis-o-lone) Common brands include: <i>Panafcortelone, Predmix</i></p>  <p>Other corticosteroids Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Betamethasone • Cortisone • Methylprednisolone • Prednisone • Triamcinolone
<p>What it is used for</p>	<ul style="list-style-type: none"> • Asthma or chronic lung disease <ul style="list-style-type: none"> ◦ Hydrocortisone: severe/very severe child asthma (<i>CARPA STM p136</i>), moderate/severe adult asthma (<i>CARPA STM p325</i>), acute COPD (<i>CARPA STM p320</i>) ◦ Prednisolone: mild/moderate child asthma (<i>CARPA STM p135</i>), mild/moderate adult asthma (<i>CARPA STM p324</i>), acute COPD (<i>CARPA STM p320</i>) • Meningitis (dexamethasone)(<i>CARPA STM p102</i>) • Immunosuppressant (eg after kidney transplant) • Other severe inflammatory or immune disorders <p>Doses: Dexamethasone — <i>CARPA STM p439, WBM p379</i> Hydrocortisone — <i>CARPA STM p439, WBM p379</i> Prednisolone — <i>CARPA STM p441, WBM p381</i></p>
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces inflammation by blocking body's natural response to infection or injury
<p>Side effects</p>	<ul style="list-style-type: none"> • Short-term — usually no problems but may affect mood and sleep • Long-term — many side effects including blood glucose disturbance, bone density loss. See <i>AMH</i> for more information






 <p>Warnings</p>	<ul style="list-style-type: none"> Blood glucose levels can increase in people with diabetes Do not use soon after chickenpox, shingles, measles infections <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Heart trouble</p> </div> <div style="text-align: center;">  <p>Stomach trouble</p> </div> <div style="text-align: center;">  <p>Mental health problems</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a short time</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>High BP</p> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Corticosteroids interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> If taking for more than 3 weeks — follow instructions for slowly reducing dose If taking for a long time — make sure you tell other doctors and health people that you are taking this medicine May cause thrush <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Take with food or milk</p> </div> <div style="text-align: center;">  <p>Return to clinic if needed for more than a short time</p> </div> </div> <p>Warning stickers (p298): 9, B, prednisolone also 6 (some oral products)</p>
<p>Check</p>	<ul style="list-style-type: none"> If using for more than 3 months — bone density test for possible damage to bones (steroid-induced osteoporosis) <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>BP</p> </div> <div style="text-align: center;">  <p>Blood test</p> </div> </div> <p>Check kidney function (UEC), BGL before giving medicine, then once a week for first month of treatment</p>


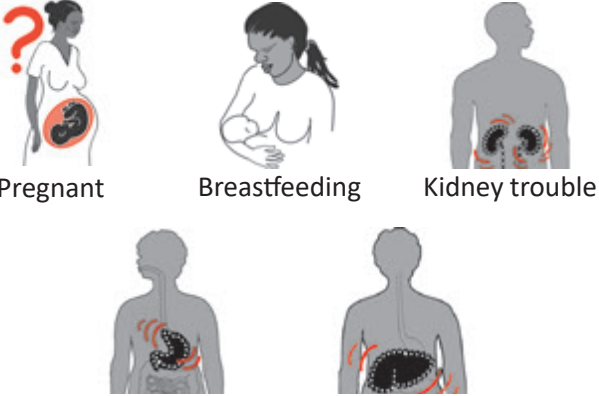



<p>Active ingredients (generic names)</p>	<p>IMMUNOSUPPRESSANTS (imm-u-no-su-press-ants)</p>  <p>Immunosuppressants include</p> <ul style="list-style-type: none"> • Corticosteroids (eg dexamethasone, prednisolone) (p214) • Calcineurin inhibitors • Cytotoxic immunosuppressants • Immunosuppressant antibodies • Sirolimus derivatives • Mycophenolate
<p>What it is used for</p>	<ul style="list-style-type: none"> • Autoimmune and inflammatory diseases — rheumatoid arthritis, psoriasis, ulcerative colitis, Crohn's disease • Organ transplants (eg kidney transplant), so body won't reject the new organ
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces effectiveness of the body's immune system • Suppresses over-active immune reactions (where immune system reacts more than needed) • Stops reactions against transplanted organs
<p>Side effects</p>	 <p>Liver damage Kidney damage Nausea and vomiting</p> <ul style="list-style-type: none"> • Easier for patients to get infections • Skin cancers <p>There are many side effects — see the <i>AMH</i> for complete list.</p>

 <p>Warnings</p>	 <p>Pregnant</p>  <p>Kidney trouble</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Immunosuppressants interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> • Increased risk of skin cancers — have regular checks • If you forget to take a dose at the usual time — take it as soon as you remember. Don't skip a dose  <p>Keep out of the sun</p>
<p>Check</p>	<p>Warning stickers (p298): 8</p>  <p>BP</p>  <p>Blood test</p> <p>Regular blood tests needed</p> <ul style="list-style-type: none"> • Grapefruit juice can cause some immunosuppressants to build up in body — ask doctor or pharmacist about this • Does person needs antibacterial prophylaxis before dental work • Has person had flu vaccination


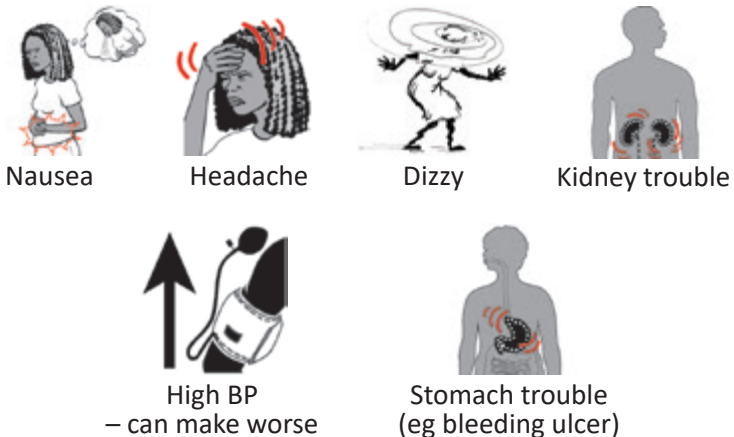
<p>Active ingredients (generic names)</p>	<p>ALLOPURINOL (al-o-pure-i-nole) Common brands include: <i>Allosig, Progout, Zyloprim</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Preventing gout attacks. Not a treatment for gout
<p>How it works</p>	<ul style="list-style-type: none"> • Gout is caused by buildup of uric acid in joints • Long-term use of allopurinol prevents gout attacks by reducing the amount of uric acid made by body 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Itchy rash</p> </div> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center;">  <p>Dizzy</p> </div> </div>








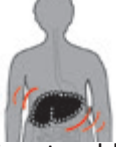








 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not start (or restart) during gout attack, but may be continued if patient already taking regularly <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult ALLOPURINOL with:</p> <ul style="list-style-type: none"> • Amoxicillin • Ampicillin • Azathioprine • Thiazide diuretics
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • If you stop tablets you will need to start again at low dose (starting at high dose may cause gout attack) • If you have not taken them for a while and you get a gout attack do not take these tablets. Talk to doctor or clinic about different medicine until attack settles down <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take with food or milk</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine – take as instructed to stop symptoms coming back</p> </div> <div style="text-align: center;">  <p>Do not drive or operate machinery if dizzy or faint</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Drink lots of water – helps stop build up of uric acid, can prevent kidney stones</p> </div> <div style="text-align: center;">  <p>Return to clinic if you get a rash, swollen lips or mouth, or fever OR sore throat that doesn't go away – stop taking medicine</p> </div> </div> <p>Warning stickers (p298): 12, B</p>
<p>Check</p>	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Check liver function tests (LFT). Check uric acid levels 4 weeks after starting medicine or changing dose, then every 6 months</p> </div> </div> <p>Blood test</p>





<p>Active ingredients (generic names)</p>	<p>COLCHICINE (col-chi-seen) Common brands include: <i>Colgout, Lengout</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Pain in gout attacks if NSAIDs (p222) can't be used • Preventing gout attacks
<p>How it works</p>	<ul style="list-style-type: none"> • When uric acid builds up in joints, the body sometimes reacts with pain, swelling, redness • Colchicine stops this reaction to uric acid to prevent or treat a gout attack 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Diarrhoea – if dose too high</p> </div> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Abdominal pain</p> </div> </div>






 <p>Warnings</p>	 <p>Pregnant Breastfeeding Kidney trouble</p> <p>Stomach trouble Liver trouble</p>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Colchicine interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> When using for gout attack, do not take more than 3 tablets in any 3 day period. Stop for 3 days in between courses Do not drink grapefruit juice — can increase amount of medicine in your blood and chance of getting side effects Do not take more than 1 aspirin tablet a day unless doctor tells you to  <p>Return to clinic if you get diarrhoea — stop taking medicine</p>
<p>Check</p>	 <p>Blood test</p> <p>If using for prevention — check uric acid Check FBC before starting medicine, after 1 month and 6 months, then once a year</p>



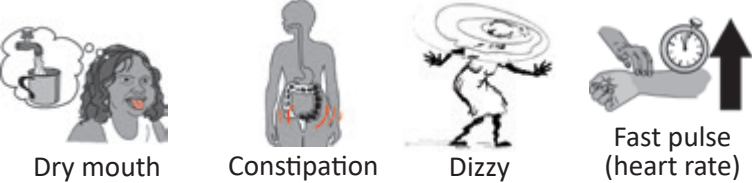
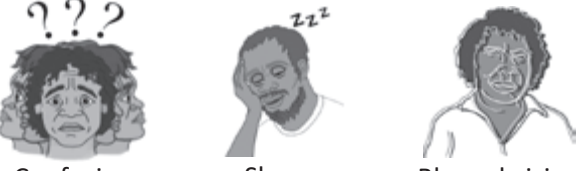
Musculoskeletal










<p>Active ingredients (generic names)</p>	<p>IBUPROFEN (i-bu-pro-fen) Common brands include: <i>Brufen, Nurofen, Rafen</i></p> <p>INDOMETACIN (in-doe-met-a-sin) Common brands include: <i>Arthrexin, Indocid</i></p>  <p>Other NSAIDs (Cox 1 and Cox 2 inhibitors) Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Aspirin (p86) • Celecoxib • Diclofenac • Ketoprofen • Ketorolac • Mefenamic acid • Meloxicam • Naproxen • Piroxicam • Sulindac • Tiaprofenic acid
<p>What it is used for</p>	<ul style="list-style-type: none"> • Dental pain (ibuprofen) (CARPA STM p337) • Fever • Gout (indometacin) (CARPA STM p371) • Kidney stone (renal colic) • Mild to moderate pain (CARPA STM p381) <ul style="list-style-type: none"> ◦ Can be used with other pain medicines (eg morphine, paracetamol) • Period pain (ibuprofen) • Stopping labour (indometacin) • Swelling and inflammation in arthritis, sprains and injuries <ul style="list-style-type: none"> ◦ Gels can be used as rubbing medicine
<p>How it works</p>	<ul style="list-style-type: none"> • Prostaglandins in body cause redness, swelling (inflammation), pain at site of injury. NSAIDs stop body making prostaglandins
<p>Side effects</p>	 <p>Nausea Headache Dizzy Kidney trouble</p> <p>High BP – can make worse</p> <p>Stomach trouble (eg bleeding ulcer)</p>



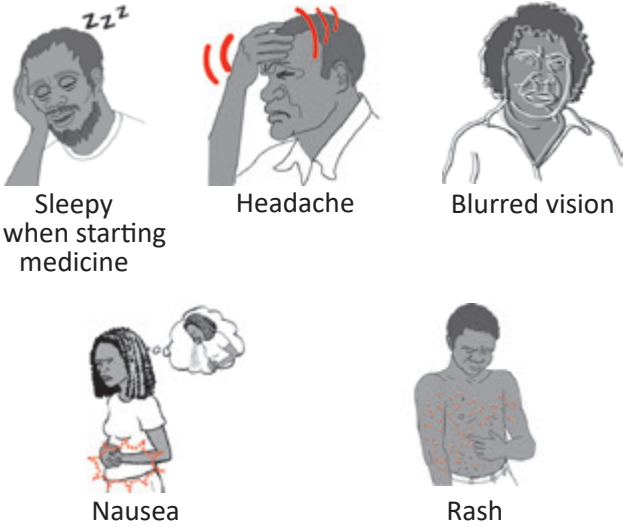
 <p>Warnings</p>	<ul style="list-style-type: none"> • People who get asthma when they take aspirin <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Pregnant </div> <div style="text-align: center;">  Old people </div> <div style="text-align: center;">  Heart trouble </div> <div style="text-align: center;">  Kidney trouble </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  High BP </div> <div style="text-align: center;">  Medical consult if needed for more than a short time </div> <div style="text-align: center;">  Liver trouble </div> <div style="text-align: center;">  Stomach trouble or ulcer before </div> </div>
	<p>Interactions — Do not use together without medical consult</p> <p>NSAID with:</p> <ul style="list-style-type: none"> • ACE inhibitor • ARB • Alendronate • Diuretics • Lithium • Warfarin <div style="border: 1px solid black; padding: 5px; display: inline-block;">  <p>Triple Whammy!</p> </div> <p>ACE inhibitor/ARB + diuretic + NSAID</p> <p>Dangerous medicine combination that can cause kidney failure. Tell patients taking ACE inhibitor or ARB and diuretics not to take NSAIDs</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Use lowest dose for shortest period of time • OK to take with low dose aspirin (p86) <ul style="list-style-type: none"> ◦ Separate by 30 minutes <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Return to clinic if needed for more than a short time OR very dark/blood-coloured vomit or faeces, swollen ankles, trouble breathing OR chest pain, irregular heart beat, sore leg veins and feel faint (CV adverse effects) </div> <div style="text-align: center;">  Take with food or milk </div> </div> <div style="text-align: right; margin-top: 10px;">  Do not drive or operate machinery if sleepy </div>
<p>Check</p>	<p>Warning stickers (p298): 10a, 12, 19b, B, indometacin also A</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  Blood test </div> <div style="text-align: center;"> <p>If using for a long time – check kidney function (UEC), liver function tests (LFT), FBC potassium level before starting medicine, then at least once a year</p>  BP </div> </div>



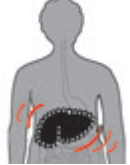







<p>Active ingredients (generic names)</p>	<p>RUBBING MEDICINE</p>  <p>Usually contains eucalyptus and/or methyl salicylate.</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Pain of strains or sprains — start applying on day 3 after injury
<p>How it works</p>	<ul style="list-style-type: none"> • Mildly irritates skin to give a feeling of warmth or coolness to sooth pain 
<p>Side effects</p>	 <p>Itch, burning</p>  <p>Rash</p>


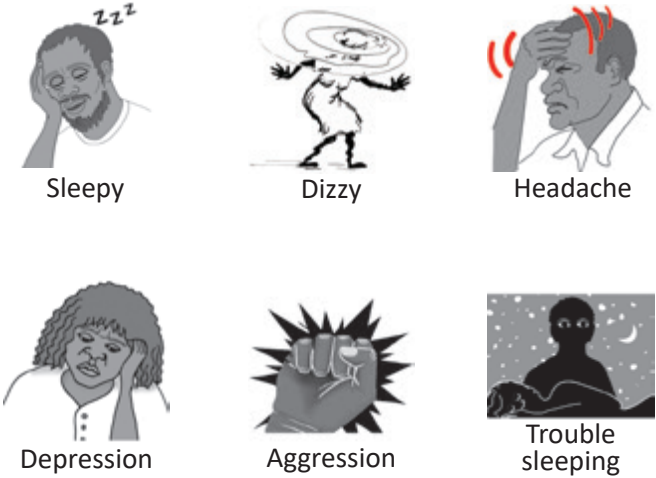
 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use in first 2 days after injury — apply on day 3 • Use RICE (rest, ice, compression, elevation) for first 2 days — see <i>Joint sprains</i> (CARPA STM p373) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Allergic to aspirin or NSAIDs (methyl salicate)</p> </div> <div style="text-align: center;">  <p>Medical consult if needed for more than a short time</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Keep away from eyes and face • Do not use on broken skin • Works better if massaged in <div style="text-align: center;">  <p>Wash hands after rubbing in</p> </div>
<p>Check</p>	







<p>Active ingredients (generic names)</p>	<p>BENZATROPINE (benz-a-tro-peen) Common brands include: <i>Benztrop, Cogentin</i></p>  <p>Other anticholinergic medicines Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Benzhexol • Biperiden
<p>What it is used for</p>	<ul style="list-style-type: none"> • Controlling side effects of antipsychotic medicines (eg haloperidol, depot antipsychotics) <ul style="list-style-type: none"> ◦ Mental health emergency (<i>CARPA STM p194</i>) ◦ Psychosis (<i>CARPA STM p206</i>) ◦ Oculogyric crisis (<i>CARPA STM p106</i>) • Parkinson's disease
<p>How it works</p>	<ul style="list-style-type: none"> • Works in brain to block cholinergic hormone receptors. This reduces some symptoms of Parkinson's disease (tremor, rigidity, too much saliva) and side effects of antipsychotics 
<p>Side effects</p>	<ul style="list-style-type: none"> • Urinary retention (can't pass urine properly)  <p>Dry mouth Constipation Dizzy Fast pulse (heart rate)</p>  <p>Confusion Sleepy Blurred vision</p>









 <p>Warnings</p>	<ul style="list-style-type: none"> • Bladder and bowel trouble • Dementia <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Heart trouble</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Eye trouble – glaucoma</p> </div> </div>
	<p>Interactions — Do not use together without medical consult</p> <p>BENZATROPINE with:</p> <ul style="list-style-type: none"> • Other anticholinergic medicines (eg amitriptyline, chlorpheniramine, promethazine, chlorpromazine, olanzapine, oxybutynin, tiotropium)
 <p>Tell the patient</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Do not drink alcohol (grog)</p> </div> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy or dizzy</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Do not stop taking medicine – take as instructed to stop symptoms coming back</p> </div>
	<p>Warning stickers (p298): 1, 9 (if taking for a long time)</p>
<p>Check</p>	<div style="text-align: center;">  <p>BP</p> </div>











<p>Active ingredients (generic names)</p>	<p>CARBAMAZEPINE (car-ba-maz-e-peen) Common brands include: <i>Tegretol</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Epilepsy (fitting) • Nerve (neuropathic) pain • Bipolar disorder — to even out mood swings
<p>How it works</p>	<ul style="list-style-type: none"> • Changes pattern of electrical activity in brain. May be useful where electrical activity is disturbed (eg epilepsy, bipolar disorder, nerve [neuropathic] pain) 
<p>Side effects</p>	 <p>Sleepy – when starting medicine</p> <p>Headache</p> <p>Blurred vision</p> <p>Nausea</p> <p>Rash</p>

 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Carbamazepine interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May stop combined oral or injected contraceptives (pill or implant) from working properly. Talk about using other contraceptive • You will feel tired for first few weeks • Do not drink grapefruit juice — can increase amount of medicine in your bloodstream and chance of getting side effects • Swallow slow-release medicines whole <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Take with food or milk</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog)</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine – take as instructed to stop symptoms coming back</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy or blurred vision</p> </div> <div style="text-align: center;">  <p>Return to clinic straight away if rash, sore throat, fever, mouth ulcers, bruising, or bleeding <i>OR</i> you are very sleepy</p> </div> </div> <p>Warning stickers (p298): 5, 9, 12, 13, 18, A (slow-release), B</p>
<p>Check</p>	<ul style="list-style-type: none"> • If used long-term — consider bone mineral density test <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 10px;"> <p>Check FBC before starting medicine. If using to treat epilepsy – check carbamazepine levels</p> </div> </div> <p style="text-align: center;">Blood test</p>

<p>Active ingredients (generic names)</p>	<p>LEVETIRACETAM (lee-ve-tyr-ra-se-tam) Common brands include:</p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Epilepsy (fitting) • Preventing fitting after head injury (<i>CARPA STM p77</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Exact mechanism unknown. May change the way messages are transmitted by the nerves (neurotransmission)
<p>Side effects</p>	<ul style="list-style-type: none"> • Loss of appetite  <p>Sleepy Dizzy Headache</p> <p>Depression Aggression Trouble sleeping</p>

 <p>Warnings</p>	 <p>Pregnant Breastfeeding Kidney trouble – reduce dose Mental health problems</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Can dilute medicine mixture in a glass of water  <p>Do not drive or operate machinery if sleepy or dizzy</p>  <p>Do not drink alcohol (grog) – medicine increases the effects</p>  <p>Do not stop taking medicine suddenly</p>
<p>Check</p>	<p>Warning stickers (p298): 1, 9</p>

<p>Active ingredients (generic names)</p>	<p>LEVODOPA + BENSERAZIDE (le-vo-doe-pa + ben-ser-a-zide) Common brands include: <i>Madopar, Madopar HBS, Madopar Rapid</i></p> <p>LEVODOPA + CARBIDOPA (le-vo-doe-pa + car-be-do-pa) Common brands include: <i>Kinson, Sinemet, Sinemet CR</i></p>  <p>Other dopaminergic combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Levodopa + carbidopa + entacapone (eg <i>Stalevo</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Parkinson's disease — levodopa • Benserazide or carbidopa added to reduce side effects like nausea, vomiting, low BP (hypotension) • Entacapone added to improve movement in people with Parkinson's disease
<p>How it works</p>	<ul style="list-style-type: none"> • Dopamine is an important chemical messenger in the brain. Parkinson's disease happens when not enough dopamine. Levodopa increases dopamine in the brain 
<p>Side effects</p>	<ul style="list-style-type: none"> • Agitation • Hallucinations • Strange movements (dyskinesia) • Loss of appetite (anorexia)  <p>Nausea and vomiting</p>  <p>Dizzy when standing up</p>  <p>Confusion</p>  <p>Depression</p>  <p>Sleepy</p>  <p>Trouble sleeping</p>




 <p>Warnings</p>	 <p>Breastfeeding</p>  <p>Eye trouble – glaucoma</p>  <p>Heart trouble</p>  <p>Mental health problems</p>
 <p>Tell the patient</p>	<p>• Swallow whole. Do not chew</p>  <p>Take at same time every day</p>  <p>Do not stop taking medicine suddenly</p>  <p>Do not drive or operate machinery if sleepy</p>
<p>Check</p>	<p>• Check for abnormal body movements</p>  <p>BP</p>











Interactions — Do not use together without medical consult




BENSERAZIDE with:




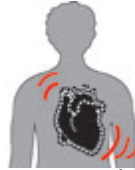








- Antiemetics (eg metoclopramide, prochlorperazine), domperidone OK
- Antipsychotics (eg haloperidol, risperidone)
- Iron — can take 2 hours before or after medicine
- Methyldopa
- Nutritional supplement drinks — give medicine first
- Phenytoin







Warning stickers ([p298](#)): 4b, 9, 16, A










<p>Active ingredients (generic names)</p>	<p>MIDAZOLAM (mi-daz-o-lam) Common brands include: <i>Hypnovel</i></p>  <p>Solution for injections can be trickled between the cheek and teeth (buccal), given in the nose, or given rectally.</p> <p>Other benzodiazepines (neurological) Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Clobazam • Clonazepam • Diazepam (p258) • Nitrazepam
<p>What it is used for</p>	<ul style="list-style-type: none"> • Acute treatment of fits (CARPA STM p57) <ul style="list-style-type: none"> ◦ Includes seizures associated with poisoning, drug or alcohol withdrawal, high temperature (febrile), long lasting seizures (status epilepticus) • Sedation in mental health emergency (CARPA STM p193) • Palliative care (CPM p135) <p>Doses — CARPA STM p58</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Works in the brain to stop or prevent fits, and cause sedation 
<p>Side effects</p>	<ul style="list-style-type: none"> • Irritability and hyperactivity — mainly in children and the elderly  <p>Sleepy Aggression Confusion Breathing trouble – may be slow</p>







 <p>Warnings</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Pregnant – during labour</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Old people</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>Breathing trouble</p> </div> <div style="text-align: center;">  <p>Warning – do not use if person drank alcohol in last 6–8 hours</p> </div> </div>
	<p>Interactions — Do not use together without medical consult</p> <p>MIDAZOLAM with:</p> <ul style="list-style-type: none"> • Diazepam — unless able to manage airway and breathing • Olanzapine IM — unless able to manage airway and breathing • Magnesium sulfate — unless able to manage airway and breathing
 <p>Tell the patient</p>	<div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div>
	<p>Warning stickers (p298): 1 or 1a</p>
<p>Check</p>	<ul style="list-style-type: none"> • Remember to sign the drug register







<p>Active ingredients (generic names)</p>	<p>PHENYTOIN (fen-i-toyn) Common brands include: <i>Dilantin</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Epilepsy (fitting) • Preventing fitting
<p>How it works</p>	<ul style="list-style-type: none"> • Works in the brain to stop or prevent fits 
<p>Side effects</p>	 <ul style="list-style-type: none"> • Signs of overdose — agitation, blurred vision, clumsy walking, jerking of eyes









 <p>Warnings</p>	<ul style="list-style-type: none"> Diabetes — risk of high blood glucose (hyperglycaemia) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Liver trouble – use lower dose</p> </div> <div style="text-align: center;">  <p>Heart trouble (phenytoin IV)</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Phenytoin interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> May stop combined oral or injected contraceptives (pill or implant) from working properly. Use condoms while taking medicine and for 4 weeks after treatment Have regular checks with dentist <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Take with food or milk – so it doesn't make you feel sick</p> </div> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy or blurred vision</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine – take as instructed to stop symptoms coming back</p> </div> <div style="text-align: center;">  <p>Brush teeth – if gums swell keep mouth and gums clean, brush teeth very gently</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Do not drink alcohol (grog)</p> </div> <div style="text-align: center;">  <p>Return to clinic straight away if signs of overdose (see <i>Side effects</i>) <i>OR</i> fever, sore throat, rash, mouth ulcers, bruising, or bleeding</p> </div> </div> <p>Warning stickers (p298): 5, 9, 12, 13</p>
<p>Check</p>	<ul style="list-style-type: none"> Capsules, tablets and liquid are not all equal — check you have the right phenytoin <div style="display: flex; justify-content: center; align-items: center;">  <p style="margin-left: 20px;">Check phenytoin levels</p> </div> <p style="text-align: center;">Blood test</p>





<p>Active ingredients (generic names)</p>	<p>VALPROATE (val-pro-ate) Common brands include: <i>Epilim, Valprease, Valpro</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Epilepsy (fitting) (CARPA STM p59) • Bipolar (mood) disorder • Preventing migraine when other medicines haven't worked
<p>How it works</p>	<ul style="list-style-type: none"> • Works in the brain to stop or prevent fits 
<p>Side effects</p>	 <p>Nausea and vomiting</p>  <p>Tremor</p>  <p>Weight gain</p>  <p>Bleeding or bruising</p>






 <p>Warnings</p>	<ul style="list-style-type: none"> • Pancreatitis <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Valproate interacts with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Swallow tablets whole. Do not chew them • Do not take more than 1 aspirin a day — low dose (100mg) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Take with food or milk – so it doesn't make you feel sick</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine – take as instructed to stop symptoms coming back</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic straight away if fever, abdominal pain, vomiting, yellowing of skin or eyes, bruising or bleeding</p> </div>
	<p>Warning stickers (p298): 9, 10a, 12, 13, A, B</p>
<p>Check</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Weight</p> </div> <div style="text-align: center;">  <p>Blood test</p> </div> </div> <p>Check liver function tests (LFT), FBC</p>






<p>Active ingredients (generic names)</p>	<p>LEVONORGESTREL + ETHINYLOESTRADIOL (lee-vo-nor-jess-trel + eth-in-ill-ess-tra-dye-ol) Common brands include: <i>Levlen, Microgynon, Nordette</i></p>  <p>Common name: the Pill, COC</p> <p>Other progesterone & oestrogen combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Cyproterone + ethinyloestradiol (eg <i>Brenda, Diane, Estelle</i>) • Desogestrel + ethinyloestradiol (eg <i>Marvelon</i>) • Dienogest + ethinyloestradiol (eg <i>Valette</i>) • Dienogest + oestradiol (eg <i>Qlaira</i>) • Drospirenone + ethinyloestradiol (eg <i>Yasmin, Yaz</i>) • Gestodene + ethinyloestradiol (eg <i>Femoden, Minulet</i>) • Norethisterone + ethinyloestradiol (eg <i>Brevinor, Improvil, NoriminSynphasic</i>) • Norethisterone + mestranol (eg <i>Norinyl</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Contraception (stopping pregnancy) (<i>WBM p349</i>) • Painful or heavy periods • Discomfort just before period (PMS)
<p>How it works</p>	<ul style="list-style-type: none"> • Combination of progestogen and oestrogen hormones stops release of egg from ovary (ovulation) 
<p>Side effects</p>	<ul style="list-style-type: none"> • Increases risk of blood clots (<i>WBM p340</i>)— need to check risk factors for clots before giving • Bleeding between periods (spotting)     <p>Nausea Headache Sore breasts Depression</p>





 <p>Warnings</p>	<ul style="list-style-type: none"> • See <i>WBM</i> (p350) for more information • Women who have had blood clot, stroke, cancer <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Greater risk from smoking if person older or has diabetes</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Combined oral contraceptives interact with a lot of different medicines that can stop it working as a contraceptive — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Which tablet to start with and when • Use condoms for 7 days <ul style="list-style-type: none"> ◦ After starting this medicine ◦ If you get severe diarrhoea <i>OR</i> vomit within 2 hours of taking the Pill • Need to take the Pill every day <ul style="list-style-type: none"> ◦ Best to take at same time, and makes it easier to remember ◦ See <i>WBM</i> (p349) or <i>AMH</i> for what to do about missed pills
<p>Check</p>	<ul style="list-style-type: none"> • Adult Health Check (<i>CPM</i> p123) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Weight</p> </div> <div style="text-align: center;">  <p>BP</p> </div> </div>



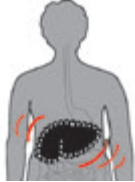





<p>Active ingredients (generic names)</p>	<p>LEVONORGESTREL (lee-vo-nor-jess-trel) Common brands include: <i>Levonelle 1, NorLevo, Postinor-1</i> Note: This monograph only applies to use of levonorgestrel for emergency contraception. It doesn't include ongoing use.</p> <p>ULIPRISTAL (ul-li-pris-tal) Common brands include: <i>EllaOne</i></p>  <p>Common names: emergency contraceptive pill, ECP, morning after pill</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Emergency contraception (stopping pregnancy) after unprotected sex (WBM p353) <ul style="list-style-type: none"> ◦ Levonorgestrel works best in first 72 hours (3 days) ◦ Ulipristal works for up to 120 hours (5 days)
<p>How it works</p>	<ul style="list-style-type: none"> • Mainly stop release of egg from ovary (ovulation) • May affect fertilisation and implantation 
<p>Side effects</p>	<ul style="list-style-type: none"> • Vaginal bleeding or spotting <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Sore breasts</p> </div> <div style="text-align: center;">  <p>Dizzy (ulipristal)</p> </div> <div style="text-align: center;">  <p>Abdominal pain (ulipristal)</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Nausea</p> </div> <div style="text-align: center;">  <p>Vomiting</p> </div> </div> <p>If women vomits after taking tablets – give antiemetic then repeat dose</p> <ul style="list-style-type: none"> • Levonorgestrel – vomits within 2 hours • Ulipristal – vomits within 3 hours


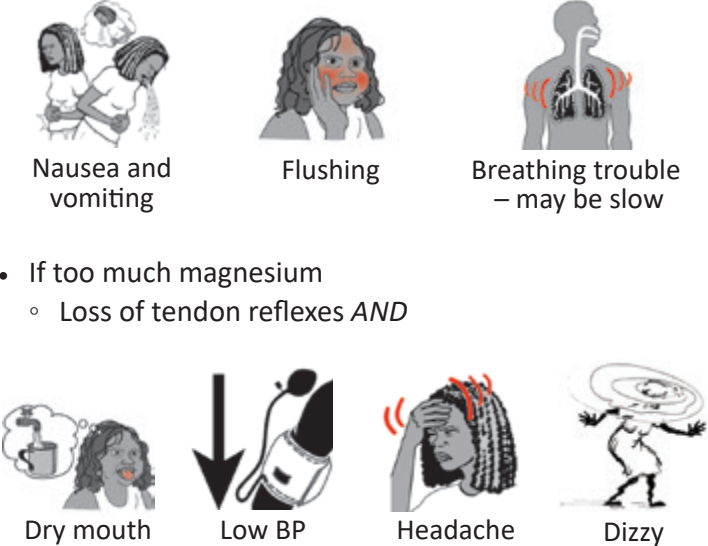
 <p>Warnings</p>	 <p>Breastfeeding – don't breastfeed for 7 days after taking (ulipristal)</p> <p>Interactions — Do not use together without medical consult</p> <p>LEVONORGESTREL ECP with: ULIPRISTAL with:</p> <ul style="list-style-type: none"> • Ulipristal • Levonorgestrel ECP • Liver enzyme-inducing medicines (p304) — use higher dose of ECP or copper IUD • Liver enzyme-inducing medicines (p304)
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • The sooner it is taken after unprotected sex, the better it works <ul style="list-style-type: none"> ◦ Levonorgestrel best taken in first 72 hours (3 days) ◦ Ulipristal works for up to 120 hours (5 days) • Return to clinic for pregnancy test if next period more than 1 week late or unusually light • Wait 5 days before starting a hormonal contraceptive (ulipristal)  <p>Return to clinic if you vomit after taking tablets – you will need another dose Levonorgestrel – vomit within 2 hours Ulipristal – vomit within 3 hours</p>
<p>Check</p>	<ul style="list-style-type: none"> • Is woman already using contraception <ul style="list-style-type: none"> ◦ Can quick start any contraceptive after using levonorgestrel (WBM p340) ◦ Need to wait 5 days after taking ulipristal before starting hormonal contraceptive. Use other form of contraception during this time (eg condoms) • STI check (WBM p238)





<p>Active ingredients (generic names)</p>	<p>ERGOMETRINE (er-go-met-reen)</p>  <p>Other oxytocic medicines Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Oxytocin (p254)
<p>What it is used for</p>	<ul style="list-style-type: none"> • To stop bleeding (haemorrhage) during and after childbirth <ul style="list-style-type: none"> ◦ Primary postpartum haemorrhage (PPH) (WBM p60) ◦ Manual removal of placenta (WBM p64)
<p>How it works</p>	<ul style="list-style-type: none"> • Causes uterus to contract, and muscle tissue in blood vessel walls to narrow, which reduces blood flow
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center;">  <p>Abdominal pain</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Can increase BP</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> </div>






 <p>Warnings</p>	<ul style="list-style-type: none"> • Mother carrying more than one baby • Severe fibroids • NOT for inducing labour <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>High BP while pregnant</p> </div> <div style="text-align: center;">  <p>Heart trouble</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div>
 <p>Tell the patient</p>	
<p>Check</p>	



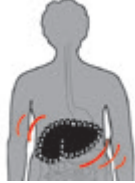




<p>Active ingredients (generic names)</p>	<p>ETONOGESTREL (et-oh-no-jes-trel) Common brands include: <i>Implanon</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Long-term contraception (stopping pregnancy) (<i>WBM p343</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Stops sperm reaching egg by thickening cervical mucus • Stops release of egg from ovary (ovulation) • Makes uterus unsuitable to keep a fertilised egg 
<p>Side effects</p>	<ul style="list-style-type: none"> • Bruising, pain when inserted or removed • No periods, irregular periods, heavy periods <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Sore breasts</p> </div> <div style="text-align: center;">  <p>Depression</p> </div> </div>









 <p>Warnings</p>	<ul style="list-style-type: none"> • Breast or liver cancer • Any unexplained vaginal bleeding must be investigated before starting this medicine • Must be inserted by someone who is trained <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div>
	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Etonogestrel interacts with a lot of different medicines that can stop it working as a contraceptive — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Can be removed at any time by someone trained to do it. Pregnancy is possible as soon as removed • Stops working after 3 years. Work out date next implant is due with woman and record in file notes <div style="text-align: center;">  <p>Return to clinic if bleeding heavy, or doesn't stop after 5 days</p> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Adult Health Check (CPM p123) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Urine pregnancy test before giving</p> </div> <div style="text-align: center;">  <p>Weight</p> </div> <div style="text-align: center;">  <p>BP</p> </div> </div>






<p>Active ingredients (generic names)</p>	<p>MAGNESIUM SULFATE (mag-nee-see-um sul-fate)</p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Fits in the second half of pregnancy (<i>WBM p19</i>) • Preventing fits if very high BP in pregnancy. See <ul style="list-style-type: none"> ◦ Severe pre-eclampsia (<i>WBM p23</i>) ◦ Stopping labour (tocolysis) (<i>WBM p33</i>) • Irregular heart beat (arrhythmia) • Severe and acute asthma
<p>How it works</p>	<ul style="list-style-type: none"> • Believed to protect nerves from injury caused by lack of oxygen, dilation of blood vessels may be involved
<p>Side effects</p>	 <ul style="list-style-type: none"> • If too much magnesium <ul style="list-style-type: none"> ◦ Loss of tendon reflexes <i>AND</i>




 <p>Warnings</p>	<ul style="list-style-type: none"> • Must have calcium gluconate injection ready in case person gets too much magnesium <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Kidney trouble – may need lower dose</p> </div> <div style="text-align: center;">  <p>Heart trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <p>MAGNESIUM SULFATE with:</p> <ul style="list-style-type: none"> • Nifedipine — may increase effects of magnesium but is often used with it • Neuromuscular blockers — used under doctor's supervision in general anaesthesia and may increase effects of magnesium • Gentamicin — may increase risk of loss of tendon reflexes
 <p>Tell the patient</p>	
<p>Check</p>	<ul style="list-style-type: none"> • During infusion — monitor <ul style="list-style-type: none"> ◦ BP ◦ Pulse ◦ Respiratory rate ◦ O₂ sats ◦ Urine output ◦ Knee or other tendon reflex




<p>Active ingredients (generic names)</p>	<p>MEDROXYPROGESTERONE (me-drox-ee-pro-jes-ter-own) Common brands include: <i>Depo-Provera, Depo-Ralovera</i></p>  <p>Common name: Depo</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Contraception (stopping pregnancy) (<i>WBM p347</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Stops pregnancy by thickening cervical mucus making it harder for sperm to enter uterus, and makes uterus unsuitable for keeping egg • Stops release of egg (ovulation) 
<p>Side effects</p>	<ul style="list-style-type: none"> • No periods, irregular periods • May be hard to get pregnant for 12 months after stopping this medicine • Decreased bone mineral density (thinner, weaker bones) — see <i>Warnings (p251)</i> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Sore breasts</p> </div> <div style="text-align: center;">  <p>Weight gain</p> </div> <div style="text-align: center;">  <p>Depression</p> </div> </div>




 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> <p>– urine pregnancy test if not sure</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <ul style="list-style-type: none"> • Any unexplained vaginal bleeding must be investigated before starting this medicine. Long-term use weakens bones (loss of bone mineral density) • Avoid use if under 18 years or over 45 years • Do not use if over 50 years • See <i>WBM</i> (p348) or <i>AMH</i> for full list of warnings <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Medroxyprogesterone interacts with a lot of different medicines that can stop it working as a contraceptive — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Lasts up to 14 weeks. Work out with patient date next injection is due and record in file notes • May be hard to become pregnant for up to 12 months after injection • Use condoms for 7 days after injection • Can't be withdrawn once it has been given <p>Warning stickers (p298): 12</p>
<p>Check</p>	<ul style="list-style-type: none"> • Adult Health Check (<i>CPM</i> p123) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Urine pregnancy test before giving</p> </div> <div style="text-align: center;">  <p>Weight</p> </div> <div style="text-align: center;">  <p>BP</p> </div> </div>


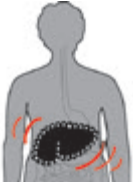




<p>Active ingredients (generic names)</p>	<p>MISOPROSTOL (my-so-prah-stole) Common brands include: <i>Cytotec</i></p>  <p>Other prostaglandins Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Dinoprost • Dinoprostone • Gemeprost
<p>What it is used for</p>	<ul style="list-style-type: none"> • Heavy bleeding after birth — primary postpartum haemorrhage (<i>WBM p60</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Softens and dilates the cervix and causes contractions 
<p>Side effects</p>	<ul style="list-style-type: none"> • Back pain  <p>Nausea and vomiting</p>  <p>Diarrhoea</p>  <p>Headache</p>  <p>High BP</p> <p>OR</p>  <p>Low BP</p>  <p>Breathing trouble – makes airways narrow</p>






 <p>Warnings</p>	<ul style="list-style-type: none"> • Untreated pelvic infection • Previous caesarean section or uterine surgery <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Asthma</p> </div> <div style="text-align: center;">  <p>High BP</p> </div> <div style="text-align: center;">  <p>Eye trouble – glaucoma</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Oral tablet can be used in rectum or vagina
<p>Check</p>	











<p>Active ingredients (generic names)</p>	<p>OXYTOCIN (ox-e-toe-sin) Common brands include: <i>Syntocinon</i></p>  <p>Other oxytocic medicines Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Ergometrine (p244)
<p>What it is used for</p>	<ul style="list-style-type: none"> • To contract the uterus and stop it bleeding. See <ul style="list-style-type: none"> ◦ Primary postpartum haemorrhage (PPH) (WBM p59) ◦ Secondary postpartum haemorrhage (WBM p212) ◦ Uterine inversion (WBM p66) • To help deliver the placenta <ul style="list-style-type: none"> ◦ Final stage of normal labour — Labour and birth (WBM p164), Birth of twins (WBM p55) ◦ Manual removal of placenta (WBM p64) ◦ Retained placenta (WBM p178) • To start or strengthen contractions during labour — hospital only
<p>How it works</p>	<ul style="list-style-type: none"> • Causes muscles of the uterus to tighten (contract) 
<p>Side effects</p>	 <p>Nausea and vomiting — rare</p>








 <p>Warnings</p>	<ul style="list-style-type: none"> • Fluid retention • Women has had multiple births • Woman has had caesarean section  <p>Heart trouble</p>
 <p>Tell the patient</p>	
<p>Check</p>	












<p>Active ingredients (generic names)</p>	<p>LEVONORGESTREL (lee-vo-nor-jess-trel) Common brands include: <i>Microlut</i></p> <p>NORETHISTERONE (nor-eth-is-ter-own) Common brands include: <i>Locilan, Micronor, Noriday</i></p>  <p>Common name: mini pill, POP</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Contraception (stopping pregnancy) (<i>WBM p351</i>) • Better choice if woman <ul style="list-style-type: none"> ◦ Breastfeeding ◦ Can't take combined oral contraceptive pill
<p>How it works</p>	<ul style="list-style-type: none"> • Stops sperm reaching egg by thickening cervical mucus • Makes uterus unsuitable to keep a fertilised egg • Stops release of egg from ovary (ovulation) in some women 
<p>Side effects</p>	<ul style="list-style-type: none"> • Irregular or heavy periods • Bleeding between periods (spotting)  <p>Depression</p>





 <p>Warnings</p>	<ul style="list-style-type: none"> • Women with breast and liver cancer • Any unexplained vaginal bleeding must be investigated before starting this medicine  <p>Liver trouble</p> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Progesterone interacts with a lot of different medicines that can stop it working as a contraceptive — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Can start POP anywhere in packet • Use condoms for <ul style="list-style-type: none"> ◦ 7 days after starting medicine ◦ 2 days if you get diarrhoea <i>OR</i> vomit within 2 hours of taking tablet • See <i>WBM</i> (p351) or <i>AMH</i> for what to do about missed pills  <p>Take pill at same time every day (within 3 hours)</p>
<p>Check</p>	<ul style="list-style-type: none"> • Adult Health Check (CPM p123)  <p>Weight</p>  <p>BP</p>











<p>Active ingredients (generic names)</p>	<p>DIAZEPAM (dye-az-e-pam) Common brands include: <i>Antenex, Valium, Valpam</i></p> <p>TEMAZEPAM (te-maz-e-pam) Common brands include: <i>Normison, Temaze, Temtabs</i></p>  <p>Other benzodiazepines (psychotropic) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Alprazolam • Clonazepam • Lorazepam • Nitrazepam • Oxazepam
<p>What it is used for</p>	<ul style="list-style-type: none"> • Anxiety disorders • Acute behavioural disturbances • Depression (<i>CARPA STM p203</i>) • Drug withdrawal <ul style="list-style-type: none"> ◦ Alcohol withdrawal (<i>CARPA STM p212</i>) ◦ Cannabis withdrawal (<i>CARPA STM p219</i>) ◦ Volatile substance withdrawal (<i>CARPA STM p228</i>) • Insomnia — to help patient sleep (temazepam) • Sedation in a mental health emergency (<i>CARPA STM p193</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Acts on specific place (receptor) in brain and makes person feel calm, sleepy, relaxed, less worried 
<p>Side effects</p>	<ul style="list-style-type: none"> • Memory loss • Slurred speech • Unsteady on feet or dizzy — risk of falls (especially old people) • Irritability and hyperactivity (mainly children and old people)  <p>Sleepy</p>  <p>Confusion</p>  <p>Breathing trouble – may be slow</p>






 <p>Warnings</p>	<ul style="list-style-type: none"> If person has been taking benzodiazepines for a long time, stopping suddenly can cause serious withdrawal symptoms <div style="display: flex; justify-content: space-around; text-align: center;"> <div>  <p>Pregnant</p> </div> <div>  <p>Breastfeeding</p> </div> <div>  <p>Old people</p> </div> </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 20px;"> <div>  <p>Liver trouble</p> </div> <div>  <p>Kidney trouble</p> </div> <div>  <p>Breathing trouble</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> Benzodiazepines interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> This medicine is only for short-term use and needs to be used as part of a plan (talk about plan with patient) If taken regularly for more than 2–4 weeks it will not work as well. You may become addicted <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 20px;"> <div>  <p>Do not drive or operate machinery if sleepy</p> </div> <div>  <p>Do not drink alcohol (grog)</p> </div> </div>
	<p>Warning stickers (p298): 1 or 1a, 9</p>
<p>Check</p>	<ul style="list-style-type: none"> Look for cause of symptoms Remember to sign the drug register







<p>Active ingredients (generic names)</p>	<p>DROPERIDOL (dro-per-i-dol) Common brands include: <i>Droleptan</i></p>  <p>HALOPERIDOL (hal-o-per-i-dol) Common brands include: <i>Serenace, Haldol</i></p> <p>Haloperidol — long-acting depot injection available if people can't take tablets every day.</p> <p>Other typical antipsychotics Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Chlorpromazine • Fluphenazine • Flupenthixol • Pericyazine • Trifluoperazine • Zuclopenthixol
<p>What it is used for</p>	<ul style="list-style-type: none"> • Agitation due to alcohol withdrawal (haloperidol with benztropine) • Psychotic symptoms in mental health emergency (haloperidol with benztropine) (<i>CARPA STM p194</i>) • Schizophrenia, perinatal psychosis, conduct disorder, agitation due to dementia (short-term use only)
<p>How it works</p>	<ul style="list-style-type: none"> • When people behave in strange or violent ways, or think strange thoughts, a brain chemical (dopamine) can be out of balance. Sometimes this is caused by using alcohol, cannabis, or sniffing volatile substances • Antipsychotics can help bring back the balance by blocking dopamine. This helps the patient deal with these thoughts and behaviours and get healthy
<p>Side effects</p>	<ul style="list-style-type: none"> • Problems with sex (eg decreased sex drive) • Strange uncontrollable movements of mouth, eyes, head or body <div style="display: flex; flex-wrap: wrap; justify-content: space-around; text-align: center;"> <div style="width: 30%;">  <p>Sleepy</p> </div> <div style="width: 30%;">  <p>Dizzy</p> </div> <div style="width: 30%;">  <p>Dry mouth</p> </div> <div style="width: 30%;">  <p>Blurred vision</p> </div> <div style="width: 30%;">  <p>Constipation</p> </div> <div style="width: 30%;">  <p>Weight gain</p> </div> </div>









 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not put person on stomach after giving haloperidol — risk of throat (laryngeal) spasm • Parkinson's disease • Diabetes <div style="display: flex; justify-content: space-around; text-align: center;"> <div>  <p>Pregnant</p> </div> <div>  <p>Children</p> </div> <div>  <p>Old people</p> </div> </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 10px;"> <div>  <p>Liver trouble</p> </div> <div>  <p>Heart trouble</p> </div> <div>  <p>People who have fits</p> </div> </div>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Antipsychotics interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine <ul style="list-style-type: none"> • Take tablets every day, or come to clinic for regular injections, to prevent symptoms coming back • Do not use cannabis (gunja) <div style="display: flex; justify-content: space-around; text-align: center; margin-top: 10px;"> <div>  <p>Return to clinic if strange body movements</p> </div> <div>  <p>Do not drive or operate machinery if sleepy or blurred vision</p> </div> <div>  <p>Do not drink alcohol (grog)</p> </div> </div>
<p>Check</p>	<p>Warning stickers (p298): 1, haloperidol also 16</p> <ul style="list-style-type: none"> • Long-acting (depot) antipsychotic injections need to be stored and given correctly. Check you know what is needed for the medicine you are giving • Do combined checks for chronic diseases (CARPA STM p239), and put on recall list


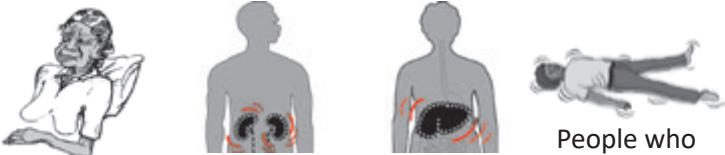



<p>Active ingredients (generic names)</p>	<p>MIRTAZAPINE (mir-taz-a-peen) Common brands include: <i>Axit, Avanza, Mirtazon</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Major depression (<i>CARPA STM p204</i>) • Helping people with depression to sleep
<p>How it works</p>	<ul style="list-style-type: none"> • Blocks specific receptors in the brain to improve the effects of serotonin and noradrenaline <ul style="list-style-type: none"> ◦ Serotonin helps control mood, emotions, eating and sleep ◦ Noradrenaline helps control energy, motivation, alertness and sleep • People who are depressed and sad may not have enough of these • Mirtazepine stops serotonin and noradrenaline going inside nerve cells so there is more left in the brain to help patient with building spirit and being strong again
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Weight gain</p> </div> <div style="text-align: center;">  <p>Sleepy</p> </div> <div style="text-align: center;">  <p>Swollen ankles</p> </div> </div>








 <p>Warnings</p>	<ul style="list-style-type: none"> • Bipolar disorder <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>People who have fits</p> </div> <div style="text-align: center;">  <p>Children and teenagers</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <p>MIRTAZAPINE with:</p> <ul style="list-style-type: none"> • Carbamazepine • Fluvoxamine • Phenytoin
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May take about 4 weeks for full effect, but you should start to feel a bit better after 1–2 weeks • Do not stop medicine suddenly — may get withdrawal symptoms. See <i>AMH</i> for details <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Do not stop taking medicine</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog) – medicine increases effects</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 20px;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div> <div style="text-align: center;">  <p>Return to clinic if you feel worse</p> </div> </div>
	<p>Warning stickers (p298): 1, 9, 13, non-disintegrating tablet also A</p>
<p>Check</p>	<ul style="list-style-type: none"> • Review patient after first few weeks of treatment, especially if young • Mental health assessment (<i>CPM p112</i>)














<p>Active ingredients (generic names)</p>	<p>NICOTINE (nic-o-teen) – for nicotine replacement therapy (NRT) Common brands include: <i>Nicabate, Nicorette, QuitX</i></p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin: 2px;">Gum</div> <div style="border: 1px solid black; padding: 5px; margin: 2px;">Lozenge</div> <div style="border: 1px solid black; padding: 5px; margin: 2px;">Inhaler</div>  </div>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Stopping smoking (<i>CARPA STM p223</i>) <ul style="list-style-type: none"> ◦ Person should also have counselling
<p>How it works</p>	<ul style="list-style-type: none"> • Nicotine (in gum, skin patch etc) is released into blood stream and goes to nicotine receptors in brain. Replaces nicotine usually supplied by smoking cigarettes and helps reduce withdrawal symptoms and craving • Nicotine is an addictive drug but small amounts are less dangerous to body than inhaling cigarette smoke 
<p>Side effects</p>	<ul style="list-style-type: none"> • Usually mild and don't last long • Vivid dreams <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>Dizzy</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> </div>







 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p style="text-align: center;">Heart trouble Stomach trouble Asthma – don't use nicotine inhaler</p> <ul style="list-style-type: none"> • Sore throat — use skin patches not oral forms of NRT • Skin trouble — don't use skin patches • Not for long-term use <p>Interactions — Do not use together without medical consult NICOTINE with:</p> <ul style="list-style-type: none"> • Cigarette smoking
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Do not smoke — you will get too much nicotine, you will feel sick and your heart will beat too fast • Do not use gum if you have dentures. Use lozenge or skin patch • If pregnant — gum or inhaler best. If using skin patch — take off at night • Make sure you use medicine properly <ul style="list-style-type: none"> ◦ Gum — chew slowly for about 30 minutes (rest gum between teeth and cheek when not chewing) ◦ Skin patch (CPM p343) — put on clean dry skin on upper body or outer arm ◦ Lozenge — do not swallow or chew, let it dissolve in your mouth (takes about 30 minutes). Do not eat or drink during this time ◦ Sublingual tablet — place 1–2 tablets under tongue and let them dissolve slowly ◦ Inhaler — takes about 20 minutes of puffing to work properly <div style="text-align: center;">  <p>Return to clinic if you feel unwell – may need dose reduced</p> </div> <p>Warning stickers (p298): 21 (patches)</p>
<p>Check</p>	




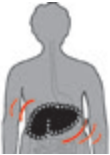






<p>Active ingredients (generic names)</p>	<p>OLANZAPINE (o-lan-za-peen) Common brands include: <i>Zyprexa</i></p> <p>PALIPERIDONE (pal-ee-per-i-done) Common brands include: <i>Invega, Invega Sustenna</i></p> <p>RISPERIDONE (ris-per-i-done) Common brands include: <i>Risperdal Consta</i></p>  <p>Other atypical antipsychotics Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Amisulpride • Quetiapine • Aripiprazole • Sertindole • Clozapine • Ziprasidone
<p>What it is used for</p>	<ul style="list-style-type: none"> • Agitation due to withdrawal <ul style="list-style-type: none"> ◦ Amphetamines (CARPA STM p216), cannabis (CARPA STM p219), volatile substance misuse (CARPA STM p228) (olanzapine) • Psychotic symptoms in mental health emergency (olanzapine or risperidone) (CARPA STM p194) • Schizophrenia, bipolar disorder, perinatal psychosis, conduct disorder, agitation due to dementia (short-term use only) • Sedation in mental health emergency (olanzapine) (CARPA STM p193)
<p>How it works</p>	<ul style="list-style-type: none"> • When people behave in strange or violent ways, or think strange thoughts, a brain chemical (dopamine) can be out of balance. Sometimes this is caused by using alcohol, cannabis, or sniffing volatile substances • Antipsychotics can help bring back the balance by blocking dopamine. This helps the person deal with these thoughts and behaviours and get healthy 
<p>Side effects</p>	 <p>Dizzy when standing up</p>  <p>Sleepy</p>  <p>Trouble sleeping</p>  <p>Anxiety (worry)</p>  <p>Headache</p>  <p>Weight gain</p>





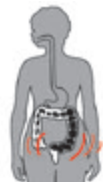


 <p>Warnings</p>	<ul style="list-style-type: none"> • Parkinson's disease (olanzapine) • Type 2 diabetes (olanzapine)  <p>Old people – low dose and only short-term</p> <p>Kidney trouble – may need lower dose</p> <p>Liver trouble</p> <p>People who have fits (olanzapine)</p> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • Antipsychotics interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Take tablets every day, or come to clinic for regular injections, to prevent symptoms coming back • Do not use cannabis (gunja)  <p>Do not drink alcohol (grog)</p> <p>Do not drive or operate machinery if sleepy or dizzy</p> <p>Return to clinic if strange body movements</p> <p>Warning stickers (p298): Olanzapine 1, 8, 16, wafers also 13 Paliperidone 1, 16, A Risperidone 1, 16, A Risperidone wafers 1, 13, 16</p>
<p>Check</p>	<ul style="list-style-type: none"> • Long-acting (depot) antipsychotic injections need to be stored and given correctly. Check you know what is needed for the medicine you are giving • Do combined checks for chronic diseases (CARPA STM p239), and put on recall list  <p>Weight</p> <p>Blood test</p> <p>Check liver function tests (LFT), FBC</p>











<p>Active ingredients (generic names)</p>	<p>DESVENLAFAXINE (des-ven-la-fax-een) Common brands include: <i>Desfax, Pristiq</i></p> <p>VENLAFAXINE (ven-la-fax-een) Common brands include: <i>Altven, Efexor-XR, Venla</i> Common name: SNRIs</p> <p>Other SNRIs Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Duloxetine
<p>What it is used for</p>	<ul style="list-style-type: none"> • Major depression (<i>CARPA STM p203</i>) • Other stress related conditions (eg anxiety, panic disorder)
<p>How it works</p>	<ul style="list-style-type: none"> • Serotonin and noradrenaline are chemicals in the brain <ul style="list-style-type: none"> ◦ Serotonin helps control mood, emotions, eating, sleep ◦ Noradrenaline helps control energy, motivation, alertness, sleep • People who are depressed and sad might not have enough of these • SNRIs stop serotonin and noradrenaline going inside nerve cells so there are more left in the brain to help patient with building spirit and being strong again
<p>Side effects</p>	<ul style="list-style-type: none"> • Problems with sex (eg low sex drive) <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Rash</p> </div> <div style="text-align: center;">  <p>Dizzy</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Sweating</p> </div> <div style="text-align: center;">  <p>Tremor</p> </div> <div style="text-align: center;">  <p>High BP</p> </div> </div>



 <p>Warnings</p>	<ul style="list-style-type: none"> • Poisonous (toxic) in overdose — avoid use if high risk of overdose • Bipolar disorder <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Children</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  <p>High BP</p> </div> <div style="text-align: center;">  <p>People who have fits</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Swallow whole. Do not crush or chew sustained release (XR) capsules • May take about 4 weeks for full effect, but you should start to feel a bit better after 1–2 weeks • Do not stop medicine suddenly — you may get withdrawal symptoms (see <i>AMH</i> for details) <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Take with food or milk – so it doesn't make you feel sick</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog)</p> </div> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div> </div>
	<p>Warning stickers (p298): 5, 9, 12, A, B</p>
<p>Check</p>	<ul style="list-style-type: none"> • Mental health assessment (CPM p112) <div style="text-align: center; margin-top: 20px;">  <p>BP (especially venlafaxine)</p> </div>






<p>Active ingredients (generic names)</p>	<p>CITALOPRAM (si-tal-o-pram) Common brands include: <i>Celapram, Cipramil, Talam</i></p> <p>FLUOXETINE (flu-ox-e-teen) Common brands include: <i>Auscap, Lovan, Prozac, Zantin</i></p> <p>FLUVOXAMINE (flu-vox-a-mine) Common brands include: <i>Faverin, Luvox, Movox, Voxam</i></p> <p>PAROXETINE (par-ox-e-teen) Common brands include: <i>Aropax, Extine, Paxtine, Roxet</i></p> <p>SERTRALINE (ser-tra-leen) Common brands include: <i>Sertra, Xydep, Zoloft</i></p>  <p>Common name: SSRIs</p> <p>Other SSRIs Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Escitalopram
<p>What it is used for</p>	<ul style="list-style-type: none"> • Anxiety disorders (eg obsessive compulsive disorder) • Bulimia nervosa • Major depression (CARPA STM p203) • Perinatal anxiety and depression • Post-traumatic stress disorder • Premenstrual dysphoric disorder (fluoxetine, sertraline)
<p>How it works</p>	<ul style="list-style-type: none"> • Serotonin is a chemical in the brain. It helps control mood, emotions, eating and sleep. People who are depressed and sad may not have enough serotonin • SSRIs stop serotonin going inside nerve cells so there is more left in the brain to help patient with building spirit and being strong again 
<p>Side effects</p>	<ul style="list-style-type: none"> • Agitation • Problems with sex (eg decreased sex drive)  <p>Sleepy</p>  <p>Nausea</p>  <p>Diarrhoea</p>  <p>Trouble sleeping</p>



 <p>Warnings</p>	<ul style="list-style-type: none"> • Bipolar disorder • People at high risk of bleeding <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Children and teenagers</p> </div> <div style="text-align: center;">  <p>Liver trouble</p> </div> <div style="text-align: center;">  <p>People who have fits</p> </div> </div> <p>Interactions — Do not use together without medical consult</p> <ul style="list-style-type: none"> • SSRIs interact with a lot of different medicines — always check with doctor or pharmacist before adding another medicine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • May take about 4 weeks for full effect, but you should start to feel a bit better after 1–2 weeks • Do not stop medicine suddenly — you may get withdrawal symptoms (see <i>AMH</i> for details) • Make sure you tell other doctors or health people you are taking this medicine <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy</p> </div> <div style="text-align: center;">  <p>Do not drink alcohol (grog)</p> </div> <div style="text-align: center;">  <p>Do not stop taking medicine</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Return to clinic if you feel strange after starting medicine</p> </div> <p>Warning stickers (p298): 5, 9, 12</p>
<p>Check</p>	<ul style="list-style-type: none"> • Mental health assessment after 2 weeks of treatment (CPM p112)





<p>Active ingredients (generic names)</p>	<p>VARENICLINE (ver-en-e-kleen) Brand names: <i>Champix</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Stopping smoking (<i>CARPA STM p223</i>) <ul style="list-style-type: none"> ◦ Person should also have counselling
<p>How it works</p>	<ul style="list-style-type: none"> • Stops nicotine binding to nicotine receptors in brain so smoking is no longer enjoyable, reduces withdrawal symptoms 
<p>Side effects</p>	<ul style="list-style-type: none"> • Side effects may be caused by giving up smoking, not by medicine • Indigestion <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Nausea and vomiting</p> </div> <div style="text-align: center;">  <p>Trouble sleeping</p> </div> <div style="text-align: center;">  <p>Constipation</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Dizzy</p> </div> <div style="text-align: center;">  <p>Headache</p> </div> </div>






 <p>Warnings</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>Breastfeeding</p> </div> <div style="text-align: center;">  <p>Kidney trouble</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Mental health problems</p> </div> <div style="text-align: center;">  <p>Medical consult if depressed or suicidal thoughts</p> </div> </div>
 <p>Tell the patient</p>	<p>Interactions — Do not use together without medical consult</p> <p>VARENICLINE with:</p> <ul style="list-style-type: none"> Nicotine replacement therapy (NRT – eg gum, skin patches) — may increase risk of nausea and other side effects Medicines that increase the risk of a fit (seizure). Includes antipsychotics, antidepressants (see AMH or ask doctor or pharmacist) <ul style="list-style-type: none"> Start taking medicine 7 days before you plan to stop smoking Do not stop taking medicine suddenly. Need to stop gradually for it to work properly and so you won't feel sick Do not crush or chew tablets Do not use nicotine replacement therapy (NRT) (p264) <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;">  <p>Do not drink alcohol (grog) – makes side effects worse</p> </div> <div style="text-align: center;">  <p>Do not drive or operate machinery if sleepy or dizzy</p> </div> <div style="text-align: center;">  <p>Return to clinic if nausea that doesn't go away or gets worse OR you feel agitated or depressed</p> </div> </div>
	<p>Warning stickers (p298): 12, 13, A, B</p>
<p>Check</p>	





<p>Active ingredients (generic names)</p>	<p>BECLOMETASONE (be-clo-met-a-son-e) Common brands include: <i>Qvar</i></p> <p>BUDESONIDE (bu-des-o-nide) Common brands include: <i>Pulmicort</i></p> <p>CICLESONIDE (cic-les-o-nide) Common brands include: <i>Alvesco</i></p> <p>FLUTICASONE PROPIONATE (floo-tic-a-zone pro-pi-o-nate) Common brands include: <i>Flixotide</i></p>  <p>Common name: preventers</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Managing asthma — adults (<i>CARPA STM p326</i>), children (<i>CARPA STM p137</i>) • Managing chronic lung disease — COPD (fluticasone propionate + salmeterol) (<i>CARPA STM p321</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces swelling of airways in lungs to help make breathing easier 
<p>Side effects</p>	<ul style="list-style-type: none"> • Hoarse voice • Thrush (fungal infection) of mouth or tongue — painful, often white coating • If using nebuliser — bruising, skin irritation on face • If dose high — can affect natural hormones, especially in children





 <p>Warnings</p>	<ul style="list-style-type: none"> • Not suitable for relieving acute attack of asthma but should be continued if already using • If giving budesonide or fluticasone propionate by nebuliser — cover person's eyes • Can be used with relievers, cromones or montelukast <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant (ciclesonide)</p> </div> <div style="text-align: center;">  <p>Children under 6 years (ciclesonide)</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Use every day, even if you feel better • Rinse mouth with water and spit out after each use • If using inhalation device (<i>CPM p360</i>) — <ul style="list-style-type: none"> ◦ Keep clean, especially nozzle ◦ Make sure you know how to use it properly • If using nebuliser — <ul style="list-style-type: none"> ◦ Cover eyes during use ◦ Wash face afterwards • If using both preventer and reliever — use reliever first • Do not use more often than prescribed, especially in children <ul style="list-style-type: none"> ◦ Talk with doctor if you think you need more <div style="text-align: center;">  <p>Puffer works best with spacer</p> </div>
<p>Warning stickers (<i>p298</i>): 14</p>	
<p>Check</p>	<ul style="list-style-type: none"> • Is asthma or COPD action plan up to date • Can person use device properly and keep it clean <ul style="list-style-type: none"> ◦ Ask them to demonstrate (<i>CPM p360</i>) • Is spacer (<i>CPM p364</i>) being used with puffer — especially important for children and the elderly







<p>Active ingredients (generic names)</p>	<p>BUDESONIDE + FORMOTEROL (EFORMOTEROL) (bu-des-o-nide + for-mo-te-rol) Common brands include: <i>Symbicort</i></p> <p>FLUTICASONE FUROATE + VILANTEROL (floo-tic-a-zone fur-o-ate + vil-an-te-rol) Common brands include: <i>Breo</i></p> <p>FLUTICASONE PROPIONATE + FORMOTEROL (EFORMOTEROL) (floo-tic-a-zone pro-pi-o-nate + for-mo-te-rol) Common brands include: <i>Flutiform</i></p> <p>FLUTICASONE PROPIONATE + SALMETEROL (floo-tic-a-zone pro-pi-o-nate + sal-me-te-rol) Common brands include: <i>Seretide</i></p>  <p>Common name: preventers</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Managing asthma <ul style="list-style-type: none"> ◦ Adults (CARPA STM p326) ◦ Children (budesonide + formoterol [eformoterol], fluticasone propionate + salmeterol) (CARPA STM p137) • Managing chronic lung disease — COPD (fluticasone propionate + salmeterol) (CARPA STM p321) • Can be used with inhaled relievers, montelukast, cromones
<p>How it works</p>	<ul style="list-style-type: none"> • Reduces swelling of airways in lungs to help make breathing easier 
<p>Side effects</p>	<ul style="list-style-type: none"> • Hoarse voice (salmeterol + fluticasone propionate, formoterol [eformoterol] + budesonide) • Thrush (fungal infection) of mouth or tongue — painful, often white coating • If using nebuliser — bruising, skin irritation on face • If dose high — can affect natural hormones, especially in children






 <p>Warnings</p>	<ul style="list-style-type: none"> • Not suitable for relieving acute attack of asthma but should be continued if already using • If giving budesonide or fluticasone propionate by nebuliser — cover person's eyes  <p>Children under 12 years (fluticasone furoate)</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Use every day, even if you feel better • Rinse mouth with water and spit out after each use • If using inhalation device (<i>CPM p360</i>) — <ul style="list-style-type: none"> ◦ Keep clean, especially nozzle ◦ Make sure you know how to use it properly • If using nebuliser — <ul style="list-style-type: none"> ◦ Cover eyes during use ◦ Wash face afterwards • If using both preventer and reliever — use reliever first • Do not use more often than prescribed, especially in children. Talk with doctor if you think you need more  <p>Puffer works best with spacer</p>
	<p>Warning stickers (<i>p298</i>): 14</p>
<p>Check</p>	<ul style="list-style-type: none"> • Is asthma or COPD action plan up to date • Can person use device properly and keep it clean <ul style="list-style-type: none"> ◦ Ask them to demonstrate (<i>CPM p360</i>) • Is spacer (<i>CPM p364</i>) being used with puffer — especially important for children and the elderly




<p>Active ingredients (generic names)</p>	<p>FORMOTEROL (EFORMOTEROL) (for-mo-te-rol) Common brands include: <i>Oxis Turbuhaler</i></p> <p>SALMETEROL (sal-mee-ter-all) Common brands include: <i>Serevent Accuhaler</i></p>  <p>Common name: LABA</p> <p>Other beta₂ agonists (long-acting) Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Indacaterol <p>Beta₂ agonist combinations</p> <ul style="list-style-type: none"> • See <i>Corticosteroids and beta₂ agonists</i> (p276)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Maintenance treatment of asthma if also using inhaled or oral corticosteroids
<p>How it works</p>	<ul style="list-style-type: none"> • Opens up small air passages in lungs to help make breathing easier and prevent asthma attacks 
<p>Side effects</p>	 <p>Headache</p>  <p>Fast pulse (heart rate)</p>  <p>Tremor</p>



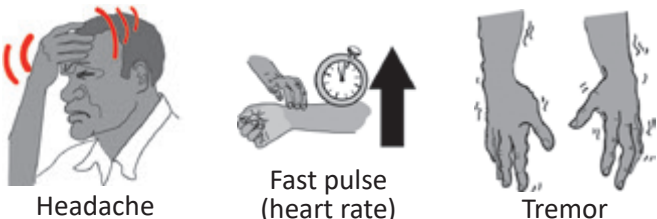
 <p>Warnings</p>	<ul style="list-style-type: none"> • Do not use salmeterol as reliever in acute asthma attack. Use salbutamol (p284) • Formoterol (eformoterol) may be used in acute asthma attack, as well as for prevention of asthma <p>Interactions — Do not use together without medical consult</p> <p>SALMETEROL with:</p> <ul style="list-style-type: none"> • Beta-blockers
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • For asthma — must be used with preventer • For COPD — can be used alone • Do not use salmeterol to treat acute asthma attack • Use every day, even if you feel better • After using inhaler with corticosteroid (preventer), rinse mouth and throat with water and spit out • Keep inhalation device (CPM p360) clean, especially nozzle <ul style="list-style-type: none"> ◦ Make sure you know how to use properly <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Puffer works best with spacer</p> </div> <div style="text-align: center;">  <p>Return to clinic if wheeze gets worse</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Is asthma action plan up to date • Can person use device properly and keep it clean <ul style="list-style-type: none"> ◦ Ask them to demonstrate (CPM p360) • Is spacer (CPM p364) being used with puffer — especially important for children and the elderly






<p>Active ingredients (generic names)</p>	<p>Short-acting IPRATROPIUM (ip-ra-trop-ium) Common brands include: <i>Aeron, Atrovent, Ipratrin</i></p> <p>Long-acting TIOTROPIUM (tio-trop-ium) Common brands include: <i>Spiriva</i></p>  <p>Other long-acting anticholinergics Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Acclidinium • Glycopyrronium • Umeclidinium <p>Long-acting anticholinergic combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Acclidinium + eformoterol (eg <i>Brimica</i>) • Glycopyrronium + indacaterol (eg <i>Ultibro</i>) • Tiotropium + olodaterol (eg <i>Spiolto</i>) • Umeclidinium + vilanterol (eg <i>Anoro</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Asthma attack (ipratropium) — adults (<i>CARPA STM p325</i>), children (<i>CARPA STM p136</i>) • Chronic lung disease — COPD <ul style="list-style-type: none"> ◦ Acute episode (exacerbation) (ipratropium) (<i>CARPA STM p319</i>) ◦ Severe exacerbation (ipratropium) (<i>CARPA STM p320</i>) ◦ Ongoing management (tiotropium) (<i>CARPA STM p321</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Opens airways so sputum easier to cough up 
<p>Side effects</p>	<ul style="list-style-type: none"> • Sore throat • Trouble passing urine (urinary retention), or worse symptoms if bladder obstruction  <p>Dry mouth</p>  <p>Blurred vision – with nebuliser</p>




 <p>Warnings</p>	 <p>Eye trouble – glaucoma</p>  <p>Medical consult if needed for more than a short time</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • For COPD, use tiotropium every day • If using inhalation device (<i>CPM p360</i>) — <ul style="list-style-type: none"> ◦ Keep clean, especially nozzle ◦ Make sure you know how to use it properly • If using nebuliser (ipratropium) — cover eyes during use  <p>Puffer works best with spacer</p>  <p>Return to clinic if you need ipratropium more than 3–4 times a week – may need a preventer</p> <p>Warning stickers (<i>p298</i>): Tiotropium 22</p>
<p>Check</p>	<ul style="list-style-type: none"> • Is asthma or COPD action plan up to date • Can person use device properly and keep it clean <ul style="list-style-type: none"> ◦ Ask them to demonstrate (<i>CPM p360</i>) • Is spacer (<i>CPM p364</i>) being used with puffer — especially important for children and the elderly






<p>Active ingredients (generic names)</p>	<p>MONTELUKAST (mon-te-loo-kast) Common brands include: <i>Lukair, Montair, Singlair</i></p>  <p>Common name: preventers</p>
<p>What it is used for</p>	<ul style="list-style-type: none"> • Asthma <ul style="list-style-type: none"> ◦ Helps prevent symptoms <ul style="list-style-type: none"> ▪ Children (CARPA STM p137) ▪ Adults (CARPA STM p326) ◦ Prevention of exercise-induced asthma • Allergic rhinitis (blocked nose caused by allergies)
<p>How it works</p>	<ul style="list-style-type: none"> • Makes airways less sensitive • Decreases swelling of the lining of the airways 
<p>Side effects</p>	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Headache</p> </div> <div style="text-align: center;">  <p>Abdominal pain</p> </div> <div style="text-align: center;">  <p>Diarrhoea</p> </div> </div>


 <p>Warnings</p>	<ul style="list-style-type: none"> • Not for relieving acute asthma attack, but should be continued if already using
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Chew tablets well before swallowing • If using to prevent exercise-induced asthma — take 2 hours before exercise <ul style="list-style-type: none"> ◦ No more than 1 dose in 24 hour • Do not use montelukast to treat asthma attack  <p>Take at night</p>
<p>Check</p>	<ul style="list-style-type: none"> • Is asthma action plan up to date



<p>Active ingredients (generic names)</p>	<p>SALBUTAMOL (sal-bu-ta-mol) Common brands include: <i>Airomir, Asmol, Ventolin</i></p> <p>TERBUTALINE (ter-bu-ta-leen) Common brands include: <i>Bricanyl</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Asthma <ul style="list-style-type: none"> ◦ Adults (CARPA STM p326) ◦ Children (CARPA STM p137) ◦ Prevention of exercise induced asthma • Chest infection with a wheeze in child (salbutamol) (CARPA STM p128) • Chronic lung disease in adult (salbutamol) (CARPA STM p314) • High potassium levels caused by missed dialysis (salbutamol) (CARPA STM p248)
<p>How it works</p>	<ul style="list-style-type: none"> • Quickly opens up small air passages in lungs to help make breathing easier • Pushes potassium into cells (salbutamol) 
<p>Side effects</p>	 <p>Headache</p> <p>Fast pulse (heart rate)</p> <p>Tremor</p>



 <p>Warnings</p>	 <p>Medical consult if person using more than 3–4 times a week – may need a preventer</p> <p>Interactions — Do not use together without medical consult SALBUTAMOL and TERBUTALINE with</p> <ul style="list-style-type: none"> • Beta-blockers
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Use when needed to help make breathing easier • Keep inhalation device (<i>CPM p360</i>) clean, especially nozzle <ul style="list-style-type: none"> ◦ Make sure you know how to use properly <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Puffer works best with spacer</p> </div> <div style="text-align: center;">  <p>Return to clinic if using more than 3–4 times a week – may need a preventer</p> </div> </div>
<p>Check</p>	<p>Warning stickers (<i>p298</i>): Salbutamol – capsules/nebules 22, if foil wrapping 7b</p> <ul style="list-style-type: none"> • Is asthma or COPD action plan up to date • Can person use device properly and keep it clean <ul style="list-style-type: none"> ◦ Ask them to demonstrate (<i>CPM p360</i>) • Is spacer (<i>CPM p364</i>) being used with puffer — especially important for children and the elderly




<p>Active ingredients (generic names)</p>	<p>IMMUNISATIONS</p>  <ul style="list-style-type: none"> • Refer to <i>The Australian Immunisation Handbook, AMH</i>, or regional immunisation schedule for complete list of vaccines and more information • Some combination vaccines are available • Must have current qualification to give immunisations
<p>What it is used for</p>	<ul style="list-style-type: none"> • Protection against serious infectious diseases
<p>How it works</p>	<ul style="list-style-type: none"> • Immunisations help body's natural defence mechanism (immune response) make antibodies that protect against certain germs • If most people in a community are immunised, they can help to stop serious infection and sickness in people with low immunity, like babies and old people
<p>Side effects</p>	<ul style="list-style-type: none"> • May be different side effects for each immunisation — see <i>Australian Immunisation Handbook</i> or <i>AMH</i> • Pain, swelling or redness at injection site • Upset or cranky (babies) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Fever</p> </div> <div style="text-align: center;">  <p>Anaphylaxis severe allergic reaction – rare</p> </div> </div>




 <p>Warnings</p>	<ul style="list-style-type: none"> • Allergy to eggs, yeast, previous immunisations • Patient prone to infection — weakened immune system <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Pregnant</p> </div> <div style="text-align: center;">  <p>High fever</p> </div> </div>
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • OK to give dose of paracetamol to babies if upset or crying (<i>CARPA STM p380</i>) <div style="text-align: center;">  <p>Return to clinic if serious side effects</p> </div> <p>Warning stickers (<i>p298</i>): 6</p>
<p>Check</p>	<ul style="list-style-type: none"> • Always have anaphylaxis kit with adrenaline (epinephrine) ready when giving vaccines (<i>CARPA STM p32</i>) • Consider calling immunisation database to check immunisation not given elsewhere • Check how to give IM injection so it won't hurt as much (<i>CPM p349</i>) • Is immunisation documented in file notes and on register, if applicable <ul style="list-style-type: none"> ◦ Is hand held record updated (eg child health record) • See <i>Cold chain procedures</i> for safely storing and transporting vaccines (<i>CPM p368</i>)








<p>Active ingredients (generic names)</p>	<p>FOLIC ACID (foe-lik as-id) Common brands include: <i>Blackmores Folate, Foltabs, Megafol</i> Also known as: folate, vitamin B9</p> <p>FOLIC ACID + IRON (foe-lik as-id + i-on) Common brands include: <i>FGF, Fefol, Ferro-F</i></p>  <p>Other medicines for anaemia Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Iron (p292) • Vitamin B12
<p>What it is used for</p>	<ul style="list-style-type: none"> • Anaemia (weak blood) in pregnancy in combination with iron (WBM p133) • Preventing birth defects — neural tube defects and spina bifida. Given in <ul style="list-style-type: none"> ◦ Antenatal (pregnancy) care (WBM p92) ◦ Diabetes in pregnancy (WBM p118) ◦ Epilepsy in pregnancy (WBM p141) • Preventing folate deficiency during dialysis • To help prevent side effects in patients taking some medicines (eg methotrexate) • Treating folate deficiency in pregnancy (WBM p135)
<p>How it works</p>	<ul style="list-style-type: none"> • Folic acid is needed by the body to make protein and build red blood cells, especially important for healthy development of fetus <ul style="list-style-type: none"> ◦ Higher doses are needed for pregnant women who have diabetes, epilepsy, BMI more than 30, or have had a previous pregnancy with a neural tube defect • Replacing folate when levels are too low • Replaces folate lost when people take some medicines (eg methotrexate), so side effects less likely
<p>Side effects</p>	



 <p>Warnings</p>	
 <p>Tell the patient</p>	<ul style="list-style-type: none">• For women who are pregnant or planning to become pregnant — if possible take folic acid for at least 1 month before getting pregnant, and then for first 3 months of pregnancy
<p>Check</p>	




<p>Active ingredients (generic names)</p>	<p>IODINE (i-o-dine)</p>  <p>Iodine combinations Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Iodine + folic acid (eg <i>I-Folic</i>) • Iodine + multivitamins (eg <i>Elevit</i>, <i>Fabfol plus</i>, <i>I-Folic</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Makes sure both mother and baby have enough iodine during pregnancy and breastfeeding. Important for development of baby's brain and nervous system <ul style="list-style-type: none"> ◦ Antenatal care (WBM p92) ◦ Diabetes in pregnancy (WBM p118) ◦ Postnatal care (WBM p196) • Part of treatment for overactive thyroid (Graves disease)
<p>How it works</p>	<ul style="list-style-type: none"> • Replaces iodine needed to make thyroid hormones • Pregnant and breastfeeding women need it for good development of the baby's brain and nervous system 
<p>Side effects</p>	<ul style="list-style-type: none"> • Allergic reaction (rare)

 <p>Warnings</p>	 <p>Thyroid problems</p>
 <p>Tell the patient</p>	<ul style="list-style-type: none">• Take once a day while pregnant and breastfeeding — unless you have a thyroid condition
<p>Check</p>	

<p>Active ingredients (generic names)</p>	<p>IRON (i-on)</p> <p>Common brands include: <i>Ferro-Gradumet, Ferro-Liquid, Ferrosig, Ferrum H</i></p>  <p>Other medicines for anaemia</p> <p>Not included in this monograph — see individual monograph or <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Vitamin B12 • Folic acid (p288) <p>Anaemia medicine combinations</p> <p>Not included in this monograph — see <i>AMH</i> for information:</p> <ul style="list-style-type: none"> • Iron + folic acid (eg <i>FGF, Fefol, Ferro-F</i>) • Iron + Vitamin C (eg <i>Ferrograd C</i>)
<p>What it is used for</p>	<ul style="list-style-type: none"> • Strengthens the blood in people who have low iron stores or iron deficiency anaemia (weak blood) <ul style="list-style-type: none"> ◦ Pregnant women (WBM p132) ◦ Children (CARPA STM p116) ◦ Adults (CARPA STM p303) ◦ Women who have heavy periods ◦ People who have lost a lot of blood from injury ◦ People with kidney failure ◦ People who don't get enough iron from food they eat <p>Doses — Adults (CARPA STM p440), pregnant women (WBM p380), children (CARPA STM p119)</p>
<p>How it works</p>	<ul style="list-style-type: none"> • Iron is needed to build red blood cells which carry oxygen to body's cells • Iron and folic acid normally come from red meat, eggs and leafy vegetables, but sometimes this isn't enough for the body's needs 
<p>Side effects</p>	<ul style="list-style-type: none"> • Black faeces  <p>Nausea Abdominal pain Constipation</p>

 <p>Warnings</p>	 <p>Anaphylaxis severe allergic reaction – rare, with injection</p> <p>Interactions — Do not use together without medical consult</p> <p>IRON with:</p> <ul style="list-style-type: none"> • Doxycycline (tetracyclines), antacids, calcium, zinc — take at least 2 hours before or after iron medicine • Quinolones (eg ciprofloxacin) — take at least 2 hours before taking iron medicine • Levodopa • Thyroxine
 <p>Tell the patient</p>	<ul style="list-style-type: none"> • Too much iron medicine is dangerous. Measure amounts carefully. Keep in a safe place out of reach of children • Do not take with tea or coffee — they stop it working properly • Mixture can stain teeth. Mix with water and drink through straw • Some iron medicines need to be swallowed whole (eg slow-release or coated tablets) • Eat foods with lots of iron — red meat, leafy vegetables <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Lock up medicines</p> </div> <div style="text-align: center;">  <p>Take on empty stomach – unless upsets stomach</p> </div> <div style="text-align: center;">  <p>Healthy food</p> </div> </div>
<p>Check</p>	<ul style="list-style-type: none"> • Always have anaphylaxis kit with adrenaline (epinephrine) ready when giving iron injections (<i>CARPA STM p32</i>) • Check for and treat cause of anaemia (low iron) (eg heavy periods, NSAIDs, hookworm) <div style="text-align: center;">  <p>Do fasting iron studies, if needed</p> <p>Blood test</p> </div>

<p>Active ingredients (generic names)</p>	<p>ZINC Common brands include: <i>Zincaps</i></p> 
<p>What it is used for</p>	<ul style="list-style-type: none"> • Persistent diarrhoea in children (<i>CARPA STM p171</i>) • Growth faltering (<i>CARPA STM p161</i>)
<p>How it works</p>	<ul style="list-style-type: none"> • Zinc increases body's immunity to infection and reduces inflammation
<p>Side effects</p>	 <p>Nausea</p>

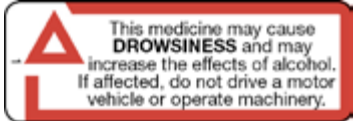
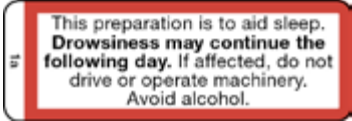
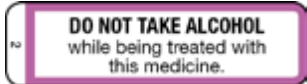
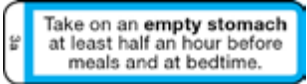
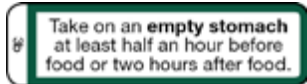

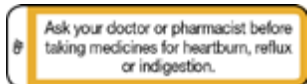
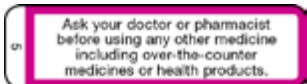



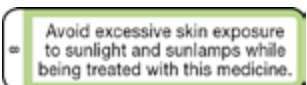

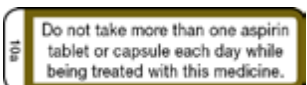


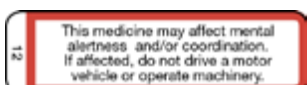
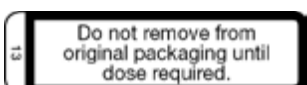
 <p>Warnings</p>	<p>Interactions — Do not use together without medical consult</p> <p>ZINC with:</p> <ul style="list-style-type: none"> • Calcium salts, iron medicines — may interfere with absorption of zinc. Take 2–3 hours before or after zinc • Quinolones (eg ciprofloxacin) — take at least 2 hours before taking zinc • Tetracyclines (eg doxycycline) — take at least 2 hours before taking zinc
 <p>Tell the patient</p>	 <p>Take with food or milk – if medicine upsets your stomach</p>
	<p>Warning stickers (p298): B</p>
<p>Check</p>	<ul style="list-style-type: none"> • Zinc is available in different strengths, you need to know the amount of elemental zinc in the medicine and check the dose in mg • See Table 2.1: Calculating doses (p313)


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Warning stickers

- These warning stickers (Cautionary Advisory Labels — CALs) help with legal requirements to correctly label medicines. Label 1 (or same information) must be applied to medicines causing sedation. Use other stickers if available
- CALs warn users about side effects and provide information about the best way to use and store medicines
- See *Australian Pharmaceutical Formulary and Handbook* for complete list of approved CAL recommendations for medicines

1		1a	
2		3a	
3b		4a	
4b		5	
6		7a	
7b		8	
9		10a	
10b		11	
12		13	

14		15a	
15b		16	
18		19a	
19b		20	
21		22	
23		24	
A		B	
C		E	
F		G	
H		I	
J		K	
L		©Pharmaceutical Society of Australia 2017. Reproduced with permission.	

Abbreviations

5HT3	5-hydroxytryptamine	IM	intramuscular (in the muscle)
ACE	angiotensin-converting enzyme	IV	intravenous (in the vein)
AMH	<i>Australian Medicines Handbook</i>	kg	kilogram
ARB	angiotensin receptor blocker	L	litre
ATSIHP	Aboriginal and Torres Strait Islander health practitioner	mg	milligram
BP	blood pressure	MIMS	medicine information reference
CAD	coronary artery disease	min	minute
cap	capsule	mL	millilitre
CARPA	Central Australian Rural Practitioners Association	MRSA	Methicillin-resistant <i>Staphylococcus aureus</i>
CARPA STM	<i>CARPA Standard Treatment Manual</i>	NOAC	novel oral anticoagulant
CD	controlled delivery	NRT	nicotine replacement therapy
CDC	Centre for Disease Control	NSAID	non-steroidal anti-inflammatory drug
CKD	chronic kidney disease	O₂	oxygen
CNS	central nervous system	OROS	osmotic-controlled release oral delivery system
COPD	chronic obstructive pulmonary disease	ORS	oral rehydration salts
CPM	<i>Clinical Procedures Manual</i>	PHU	Public Health Unit
CPR	cardiopulmonary resuscitation	PID	pelvic inflammatory disease
CR	controlled release	PMS	pre-menstrual syndrome
CSLD	chronic suppurative lung disease	qid	quarter in die – 4 times a day
CVS	cardiovascular system	SAS	special access scheme
Depo	medroxyprogesterone depot injection	SNRI	serotonin and noradrenaline reuptake inhibitor
DNA	deoxyribonucleic acid	SR	slow-release <i>OR</i> sustained-release
DPP4	dipeptidyl peptidase-4	SSRI	selective serotonin reuptake inhibitor
eg	exempli gratia – for example	STI	sexually transmitted infection
ENT	ear, nose and throat	TB	tuberculosis
EPO	epoetin (medicine group)	UTI	urinary tract infection
ER	extended release	WBM	<i>Women's Business Manual</i>
g	gram	XR	extended release
GLP-1	glucagon-like peptide-1		
HCT	hydrochlorothiazide		
HIV	human immunodeficiency virus		

Blood tests

BGL	blood glucose level
CK	creatinine kinase
FBC	full blood count
INR	international normalised ratio (to check blood clotting)
LFT	liver function test
RF	rheumatoid factor
TFT	thyroid function test
UEC	urea, electrolytes and creatinine. Includes a kidney function test

Glossary

Active ingredient — chemical in a medicine that makes the desired changes in the body (eg aspirin reduces inflammation). Other non-active ingredients in medicines do not cause changes — these include wheat, sugar, colouring.

Acute — starts suddenly, usually lasts for a short time, can get worse quickly, may need urgent care.

Adrenaline (epinephrine) — hormone and neurotransmitter produced by the body, usually in response to stress. Increases heart rate, constricts blood vessels, and opens air passages. Also a medicine used to treat anaphylaxis, shock, cardiac arrest.

Allergic reaction — overly sensitive immune response to substances that are usually harmless (eg pollen).

Anaphylaxis (anaphylactic shock) — severe allergic reaction that needs urgent medical attention. Symptoms include difficult or noisy breathing, swelling of tongue or throat, loss of consciousness.

Angina — chest pain felt when the heart can't get enough blood and oxygen. Usually caused by coronary artery disease.

Antibiotic — medicine that kills or stops growth of certain bacteria. Antibiotics can attack a bacteria's cell wall, or stop it from reproducing.

Antibody — molecule made by body's immune system that can recognise and attack a specific invading germ. Created when person is infected with a germ or immunised against it. Can also pass from mother to child during breastfeeding, another good reason to breastfeed.

Antivirals — medicines that can slow growth of, but not kill, certain viruses. Used for treating viral diseases including HIV and herpes.

Arrhythmia — when the heart skips a beat, beats irregularly, beats too quickly or too slowly.

Autoimmune disorder — person's immune system mistakenly attacks its own body tissues and makes person unwell (eg rheumatoid arthritis).

Bacteria — single cell micro-organisms that exist everywhere. May be essential, helpful, harmless, or cause infections or disease.

Beta receptor — special molecule that responds to messages carried by central nervous system and hormones. Most found in the heart and blood vessels, where they can increase BP. Some medicines block beta receptors to reduce BP and the work load on the heart.

Bloating — swelling of the abdomen.

Cardiac arrest — heart is unable to contract properly so the blood stops circulating. Can be caused by a heart attack. Treatment is cardiopulmonary resuscitation (CPR) and defibrillation.

Cholesterol — fat-like substance made by the body and found in foods made from animals (eg meat, dairy products). Important for cell structure and function. Too much cholesterol will gradually clog blood vessels supplying the heart.

Chronic — lasts for a long time or doesn't change.

Congenital — condition that a person is born with (eg a heart problem). It can be inherited (genetic) or caused by environmental factors.

Coronary artery disease (CAD) — blood vessels going to the heart are clogged and narrowed so the heart doesn't get enough oxygen and nutrients to function properly. People with CAD have chest pain, can be short of breath, are at risk of having a heart attack.

Diabetes — chronic condition where levels of glucose (sugar) in blood are too high. Pancreas can't make enough insulin to control blood glucose levels. Can lead to heart disease, kidney, eye or nerve damage

- **Type 1 diabetes** — autoimmune disease. Usually starts in childhood or adolescence, often in people who are otherwise healthy
- **Type 2 diabetes** — metabolic disease where some organs (eg pancreas, liver) become diseased or do not function normally. Usually starts in adulthood, contributed to by an unhealthy lifestyle (eg overweight, lack of physical activity).

Diuretic — medicine that increases urination and passing of water from body. Used to remove fluids that build up when the heart is not pumping properly.

Drug — substance that, when absorbed by body of a living organism, changes how the body normally functions. Called medicines when used to treat, cure, prevent, or diagnose disease, or to improve physical or mental wellbeing.

Electrolytes — electrically charged salts found in body fluids. Include sodium, potassium, magnesium, calcium. Help carry nerve impulses, help muscles contract. Kidney failure, severe vomiting, diarrhoea or dehydration can cause electrolytes to become unbalanced.

Full blood count (FBC) — laboratory blood test. Also called FBE – full blood examination, CBC – complete blood count, CBE – complete blood evaluation.

Fungus — an organism that's not a plant, animal or bacteria. Yeasts, moulds and mushrooms are all types of fungi. Some fungi grow on human skin and nails and cause infection — more common in moist conditions. Penicillin is made by a fungus.

Heart attack (myocardial infarction) — blockage of blood to the heart causing heart cells to die. Cardiac arrest occurs when the heart is unable to contract.

Histamine — produced as part of the body's immune response to a threat (eg from bacteria or viruses). It triggers inflammation that helps damaged body parts to heal, and acts as a neurotransmitter. Antihistamines or histamine antagonists inhibit the action of histamine and are used to treat allergic reactions (eg runny nose).

Hormone — chemical released in one part of the body that takes messages through the blood stream to cause changes in another part of the body.

Hyperglycaemia — blood glucose levels too high. Can indicate diabetes or impaired glucose tolerance. Happens when body doesn't make enough insulin or can't use it properly, or person with diabetes isn't taking enough blood glucose control medicine.

'Hypo' (hypoglycaemia) — blood glucose level too low. Causes person to tremble, sweat, and become confused. Can happen if person gets too much insulin or has not been eating properly. Hypos range from minor to very serious.

Immunisation — receiving a vaccine and then becoming immune to a disease. Vaccines create immunity by enabling the body to build antibodies to fight the particular disease (eg polio, whooping cough).

Infection — invasion of micro-organisms (eg virus, bacteria, fungus) in a body part or tissue. Can cause damage or disease.

Inflammation — body's response to infection, damage or irritants. Caused by increased movement of plasma and white blood cells into damaged tissues, makes tissue look red and swollen.

International normalised ratio (INR) — test of how well blood clots. Mainly used to check warfarin therapy, which is used to thin the blood.

Liver enzyme-inducing medicines — medicines that cause liver to make more of some enzymes it normally produces. Extra enzymes change the way other medicines work (eg increasing or decreasing their effect). Medicines causing the liver to make more enzymes include:

- Strong effect — carbamazepine, enzalutamide, phenytoin, rifampicin, St John's wort
- Moderate effect — bosentan, efavirenz, etravirine, modafinil
- Other — aprepitant, corticosteroids, dabrafenib, nevirapine, phenobarbitone, rifabutin, ritonavir, tipranavir, vemurafenib

Medicine — drug used to treat, cure, prevent, diagnose disease, or to improve physical or mental wellbeing.

Metabolism — the chemical and physical processes in the body that use energy for growth and to maintain life. Hormone thyroxine helps determine how fast or slow the chemical reactions of metabolism happen in a person's body.

Micro-organism — organism that is too small to see without a microscope. Usually single cell organism such as bacteria.

Mood — emotional state, may last for longer than usual if person is unwell.

MRSA (methicillin-resistant *Staphylococcus aureus*) — type of *Staphylococcus aureus* bacteria resistant to methicillin and some other antibiotics. Usual antibiotics don't work so infection harder to treat, more dangerous to patient.

Neurotransmitter — chemical used by the brain and nerves to pass messages.

Opioid — medicine that binds to receptors in the brain, decreases pain and increases pain tolerance. Opioids include heroin, morphine, codeine.

Organism — living thing such as an animal, plant, fungus, bacteria.

Osteoporosis — condition where bones become thinner and weaker over time.

Pathogenic — something able to cause disease or infection (eg a germ).

Platelets — similar to cells, circulate in the blood. Not enough can lead to excessive bleeding, too many can cause unwanted blood clots.

Prophylaxis — use of a medicine or other treatment to prevent disease.

Receptor in the brain — sensory nerve ending that changes specific stimuli into nerve impulses.

Resistance (to antibiotic) — when antibiotic once used to kill a certain bacteria no longer does so (ie antibiotic stops working). For example mupirocin is no longer used on school sores as resistance quickly develops.

Serum sickness — body's immune system reacts to antibodies that come from animals (eg in antivenoms). Can take up to 2 weeks to develop. Usually includes rashes, itching, muscle or joint pain — but can be more serious.

Shock — when there is not enough blood being pumped around the body. Life threatening condition usually brought on by serious injury or illness.

Steroids — hormones that are important for metabolism, immune reactions, water and salt balance. Human body produces a range of steroids for different purposes. Steroids are also strong, effective medicines (cream, ointment, tablet, injection) for a variety of medical conditions (eg allergic reactions, asthma, skin conditions).

Stroke — supply of blood to the brain is disrupted because an artery is blocked or has burst. Lack of oxygen causes brain cells to be damaged or die.

Therapeutic — helps treat or improve illness.

Triple whammy — dangerous combination of 3 medicines: ACE inhibitor/ARB + diuretic + NSAID. Can cause kidney failure. Patients taking ACE inhibitors or ARBs **and** diuretics **should not** take NSAIDs.

- ACE inhibitor/ARB — decrease blood pressure and increase blood flow by widening the blood vessels, increases blood flow out of the kidneys
- Diuretic — acts on the kidneys, increases urination and passing of water from body
- NSAIDs — anti-inflammatory analgesics (eg aspirin, ibuprofen) restrict blood flow to the kidneys

Interaction is more dangerous if the kidneys are already starting to fail.

Urinary tract infection — infection of kidney, bladder or urinary tract.

Vaccination — having a vaccine, ie actually having the injection.

Virus — infectious agent that grows inside other organisms. Causes an immune response. Antibiotics can't fight viruses, but antiviral medicine can slow their growth, and vaccines help immunise the body against them.

Anatomy dictionary

Using this dictionary

This dictionary gives a brief overview of some body organs and systems.

- **First point** tells you what it does and how it works
- **Second point** tells you about things that can make it stronger or weaker
- **Third point** tells you how it is affected by medicines or other drugs

Brain



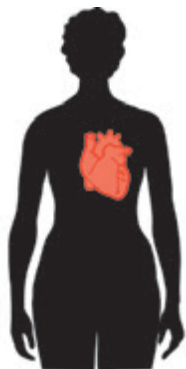
- The brain is the centre of the nervous system and controls all other organ systems in the body through electrical impulses or chemicals
- Affected by diseases such as epilepsy and mental illnesses (eg depression, schizophrenia). Damaged by impact (injury), lack of blood supply, chemicals in the blood (eg alcohol). Exercise helps keep a good blood supply to the brain and can improve depression
- Some medicines alter messages being sent within, and to and from the brain (eg pain messages). Medicines can help to control seizures, relieve anxiety and depression, make you sleep

Central nervous system (CNS)



- CNS is made up of the brain and spinal cord. Operates using electrical impulses or chemicals so all parts of the body can communicate
- Damaged by injury and infection. Damage can result in paralysis if messages from the brain can't pass along spinal cord
- Drugs such as alcohol and opioids can depress (slow) CNS so that the heart, breathing, or movements may slow or stop altogether. Some medicines act by stimulating or depressing the CNS or reducing pain messages

Heart



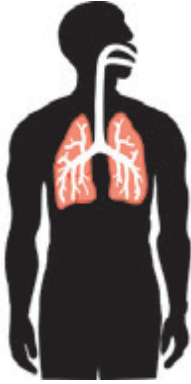
- The heart is a muscle that contracts regularly to pump blood around the body
- Regular exercise makes the heart strong. Damaged or weakened by smoking, lack of physical activity, fatty and/or salty foods. Blockages that stop blood reaching it can cause a heart attack. Affected by cardiovascular diseases such as high BP, problems with rhythm (arrhythmia), diabetes
- Medicines can help the heart by
 - Evening out the heart beat (antiarrhythmics)
 - Thinning the blood (antiplatelets, warfarin)
 - Opening up or relaxing blood vessels and lowering BP (antihypertensives)
 - Removing excess fluid (diuretics)
 - Lowering fat (lipids) in the blood
 - Dissolving blood clots or stopping blood clots forming (thrombolytics)

Blood — circulatory/cardiovascular system (CVS)



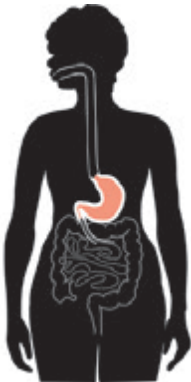
- CVS is made up of the heart and blood vessels (arteries, veins and capillaries)
- Good blood supply to all parts of the body needed for good health — blood provides nutrients and oxygen, removes waste. Damaged by smoking (kills small capillaries and blocks arteries), diabetes (damages walls of blood vessels), too much fatty food (blocks arteries)
- See *Heart* for how medicines affect the blood system

Lungs — respiratory system



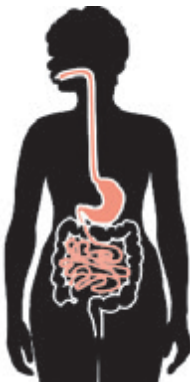
- Lungs put oxygen into the blood so it is circulated around the body
- Badly damaged by smoke, dust, infections (eg pneumonia), especially during childhood. Affected by conditions such as asthma and COPD. Lungs are kept healthy with exercise, good hygiene, not smoking, keeping out of dust and fire smoke
- Medicines help treat lung infections (eg antibiotics), control asthma, help breathing

Stomach



- The stomach is the main organ in the digestive system. It begins breakdown (digestion) of food by churning it with enzymes and acid
- Damaged by infections that cause ulcers, too much acid, too much alcohol, some medicines
- Medicines treat infections and help stop the stomach producing too much acid (eg proton pump inhibitors). Some medicines (eg NSAIDs) must be taken with food so they don't damage stomach lining

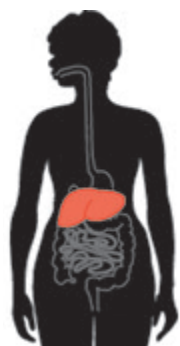
Digestive system



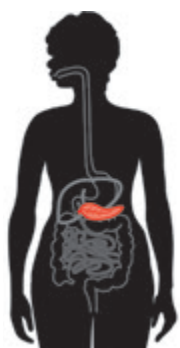
- Digestive system breaks down food, provides nutrition for the body, removes waste. Includes mouth, oesophagus, stomach, intestines, rectum
- Doesn't work well if not enough fibre (eg fruit, vegetables, grains) in food eaten or if person eats too much. Bowel cancer is associated with obesity
- Medicines can help reduce acid in the stomach, and relieve nausea (antiemetics), constipation (laxatives), diarrhoea

Kidneys — urinary system

- Kidneys help remove waste from the blood and regulate the body
- Affected by repeated urinary tract infections, skin infections, high BP, diabetes, too much alcohol (grog), old age
- Can be badly damaged by taking too much of some medicines. Other medicines help damaged kidneys function better and remove waste from the body

Liver

- The liver cleans the blood and helps with digestion
- Badly damaged by too much alcohol (grog), infections (eg hepatitis), too much of some medicines (eg paracetamol)
- Medicines can help treat infections and improve functioning

Pancreas

- Pancreas makes hormones (eg insulin) and enzymes that help to break down food in the small intestine
- Damaged by too much alcohol, gallstones, infections (eg mumps). If pancreas can't make enough insulin to break down sugar — person will develop diabetes
- Medicines can help increase the amount of insulin made by the pancreas to help control diabetes, and replace enzymes that break down food

Thyroid

- The thyroid is one of the largest glands in the body. Produces hormones that regulate metabolism and affect the growth and functioning of many other systems in the body
- Wrong amounts of thyroid hormones can make people very unwell
- Medicine (eg thyroxine) can help to control amount of thyroid hormone in the body

Reproductive system

- In women — vagina, uterus, ovaries.
In men — testes, penis
- Damaged by infections, especially STIs. Problems for women include having trouble getting pregnant, bleeding, cancer
- Medicines can prevent pregnancy (eg the Pill), help to control bleeding and ovulation, and treat infection. Some medicines can harm production of sperm, others can harm an unborn baby

Musculoskeletal system

- Musculoskeletal system gives us shape, lets us move by contracting the muscles to pull the bones
- Affected by injuries that break bones or tear muscles, bone infections, arthritis, osteoporosis. Physical activity and good nutrition when young build strong bones and muscles
- Some medicines can help build bones, others can damage them. Medicines can help to relieve pain associated with arthritis and inflammation, and treat infections

Skin



- The skin is the largest body organ. It helps regulate temperature, protects the body from germs and fluid loss, and stores water, fat and vitamin D. It allows us to feel sensations
- Damaged by injuries (especially burns), too much sun, smoking. Affected by dermatitis, eczema, allergies, infections
- Medicines can treat infections, reduce inflammation and allergies (eg cortisone creams)

Ears



- The inner and outer ear let us hear by sensing movements in the air and converting them to signals that are sent to the brain. The inner ear also helps us to balance
- Structure of ear can be badly damaged by meningitis, chest and ear infections (especially when young) resulting in poor hearing, learning, language development
- Medicines can help treat meningitis, ear and respiratory infections

Eyes



- Eyes allow us to see by detecting light and converting it into a picture (image) in our brain
- Affected by allergies, infections, glaucoma. Badly damaged by too much sun (especially midday sun), diabetes, smoking, infections such as trachoma. Important to protect eyes by keeping them clean, out of bright light, eating good food, having regular eye checks
- Medicines can help treat eye infections, glaucoma, allergies

Nose



- The nose lets us smell and taste, cleans and warms the air we breathe in
- Allergies and infections can irritate lining of the nose causing swelling and blockages, make the nose run
- Medicines can treat allergies, or open a blocked nose (eg nasal sprays)

Calculating medicine doses and drip rates

Dose calculations

- Dosages often written as amount/kg/dose (eg 25mg/kg/dose)
 - This means a dose is made up of 25mg for each kg of body weight
- **Dose needed = amount of mg/kg x weight of person in kg**
 - *Example:*
 - Amount in mg/kg is 25mg/kg, weight of person is 12kg
 - Dose needed = 25mg/kg x 12kg = 300mg

Table 2.1: Calculating doses

TABLETS	
Number of tablets needed = dose needed [a] ÷ strength of tablet [b]	<i>Example:</i> Dose needed is 15mg [a] Strength of tablet is 10mg [b] Number of tablets = 15mg ÷ 10mg = 1.5 (1½) tablets
MIXTURES OR INJECTIONS — small volume IM or IV push	
Volume needed (mL) = (dose needed [a] ÷ strength of mixture or injection [b]) x volume this strength is in mL [c]	<i>Example 1:</i> Dose needed is 300mg [a] Strength is 250mg/5mL [b/c] Volume needed = (300mg ÷ 250mg) x 5mL = 1.2mg x 5mL = 6mL
	<i>Example 2:</i> Dose needed is 20mg [a] Strength is 30mg/mL [b/c] Volume needed = (20mg ÷ 30mg) x 1mL = 0.67mg x 1mL = 0.67mL

Note: Dosage examples given in mg, but same formulas can be used for other strengths (eg microgram). Must use same unit for strength and for dose needed (eg mg and mg, microgram and microgram).

Quick calculations

- **Dose needed** = amount of medicine per kg x body weight (kg)
- **Number of tablets needed** = dose needed ÷ strength of tablet
- **Volume of mixture or injection needed (mL) =**

$$\frac{\text{dose needed}}{\text{strength of mixture or injection}} \times \text{volume this strength is in (mL)}$$

Table 2.2: Calculating drip rates and infusion rates for IV fluids

GRAVITY ADMINISTRATION SET	
Remember: Check drop rate on infusion set packet (eg 20 drop/mL, 60 drop/mL)	
Rate (drops/min) = (total volume of solution (mL) [a] x number of drops/mL [b]) ÷ time in minutes [c]	<i>Example:</i> Volume of fluid to give is 1000mL (1L) [a] Set delivers 20 drop/mL [b] Time to give is 5 hours = 5 x 60 = 300 minutes [c] Rate (drops/min) = (1000mL x 20 drops/mL) ÷ 300 min = 20,000 drops ÷ 300 minutes = 67 drops/min
INFUSION PUMP — setting dials	
Remember: Always check instructions for your machine	
Rate (mL/hr) = volume of solution (mL) [a] ÷ time (hr) [b]	<i>Example:</i> Volume of medicine is 5mL, volume of fluid is 1000mL (1L). Total volume of solution to give is 1005mL [a] Time to give is 5 hours [b] Rate (mL/hr) = 1005mL ÷ 5 hours = 201mL/hr

Units and concentrations

- 1 litre (L) = 1000 millilitres (mL)
- 1 milligram (mg) = 1000 micrograms
- 1 gram (g) = 1000 milligrams (mg)
- 1% solution = 1g of solute dissolved in 100mL of solution
- 1:1000 = 1g solute dissolved in 1000mL of solution = 1mg solute dissolved in 1mL of solution

Converting units

- Grams (g) to milligrams (mg) = g x 1000
 - OR move decimal point 3 numbers to right
- Milligrams (mg) to grams (g) = mg ÷ 1000
 - OR move decimal point 3 numbers to left
- Milligrams (mg) to micrograms = mg x 1000
 - OR move decimal point 3 numbers to right
- Micrograms to milligrams (mg) = microgram ÷ 1000
 - OR move decimal point 3 numbers to left
- Litres (L) to millilitres (mL) = L x 1000
 - OR move decimal point 3 numbers to right

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