Commonly Prescribed Drugs in Community

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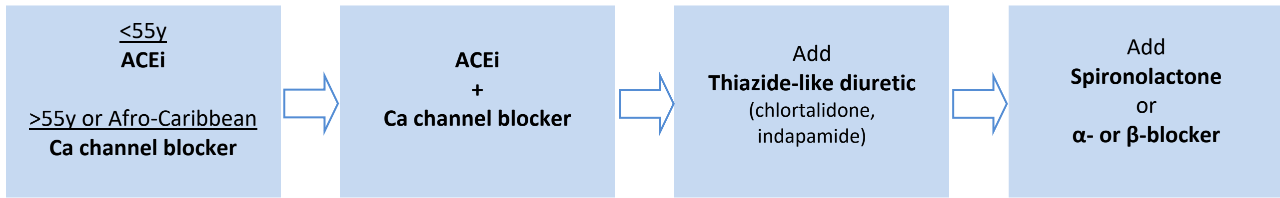
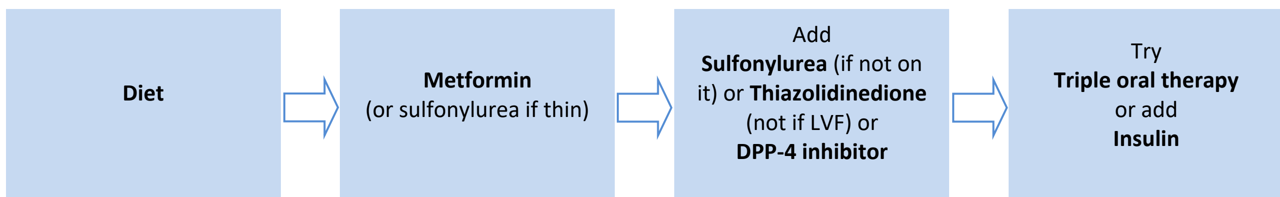
Anti-hypertensives



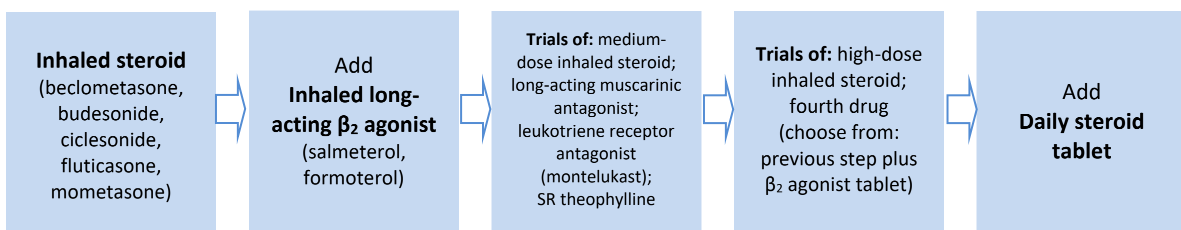
Oral hypoglycaemics



Drug class	Drug name	Mechanism	Side effects	Contraindications
Biguanides	Metformin	↑insulin sensitivity and supress gluconeogenesis	-GI disturbance -Weight loss -Lactic acidosis -Metallic taste	-Low BMI -Creatinine >150 or GFR <30
Sulfonylureas	Gliclazide, Glibenclamide	↑β-cell insulin secretion (must be at mealtimes)	-Hypos -Weight gain	-Patients at risk of hypos -Severe hepatic/renal impairment
Thiazolidinedione	-glitazones e.g. Pioglitazone	PPARγ agonist → increases fat/muscle glucose uptake	-Fluid retention -Fractures (glitaz*ones* and broken *bones*) -Hepatotoxic -Weight gain	-Heart failure -History of bladder cancer
DPP4-inhibitors	Sitagliptin	Inhibits DPP4 which breaks down GLP-1 (a hormone released by the gut to ↑insulin after food)	-Pancreatitis has been reported	
GLP-1 agonist (S/C)	Exenatide	Mimics GLP-1 (a hormone released by the gut to ↑insulin after food)	-GI disturbance and indigestion -Pancreatitis -Weight loss	-GFR <50 -History of pancreatitis -Severe gastrointestinal disease
SGLT2-inhibitors	-flozins e.g. Dapagliflozin, Canagliflozin, Empagliflozin	Increase urinary glucose excretion	-UTIs -Ketoacidosis	-GFR <30
Meglitinide	-glinides e.g. Repaglinide, Nateglinide	Closes ATP-dependant K+ channel of β-cells → insulin release pre-meal	-Hypos -Weight gain	-Patients at risk of hypos

Note: only metformin and insulin are known to be safe in pregnancy; all drugs should be temporarily discontinued in ketoacidosis; metformin should be temporarily discontinued in lactic acidosis, peri-operatively and if using iodinated contrast agents.
Note: aim HbA1c 48-58mmol/mol

Asthma ladder



PULS Inhaled **Short-acting β_2 agonist** (salbutamol)

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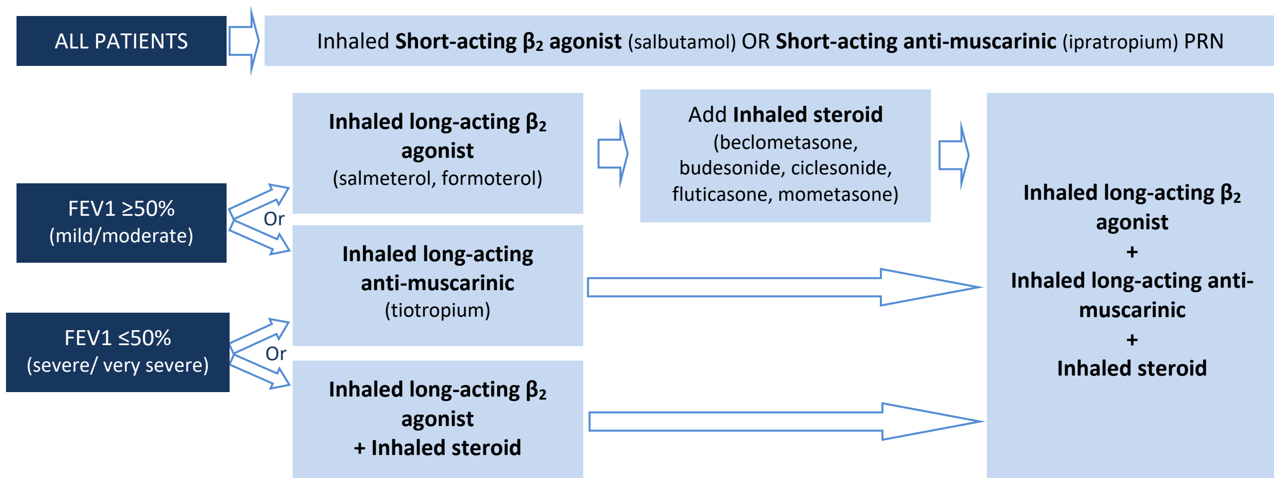
COPD ladder



Combination inhalers
Seretide = salmeterol + fluticasone
Symbicort = formoterol + budesonide
Fostair = formoterol + beclometasone

Hormone replacement therapy

- Routes of administration
  - Systemic: oral; transdermal (patches or gels) – *available in oestrogen-only or combined preparations*
  - Vaginal (for urogenital atrophy): tablet, cream, pessary or vaginal ring
- Types of systemic therapy
  - **No uterus → oestrogen-only HRT** (oral or transdermal)
  - **Uterus**
    - **Peri-menopausal → cyclical HRT** (oestrogen every day, but oestrogen and progesterone given together for 12-14 days to cause bleed at the end of every menstrual cycle ('monthly') if still having regular periods or every 13 weeks ('three-monthly') if having irregular periods)
    - **Post-menopausal (i.e. no periods for >1 year or been on cyclical HRT for >1year) → continuous HRT** (continuous combined oestrogen and progesterone – no bleed)

Contraindications: undiagnosed PV bleeding; pregnancy/breastfeeding; oestrogen dependant cancer; active liver disease; uncontrolled hypertension; history of breast cancer; history of venous thromboembolism; recent stroke/MI/angina
Side effects: vaginal bleeding; premenstrual syndrome; breast tenderness; leg cramps; nausea/bloating
Long term risks: increased venous thromboembolic risk; increased stroke risk; increased breast cancer risk with time; increased ovarian cancer risk >5y; increased endometrial cancer risk (but only with unopposed oestrogen)

Antidepressants

Drug class	Drug name	Mechanism	Side effects	Notes
Selective serotonin reuptake inhibitors (SSRIs) 1st line	Fluoxetine, Citalopram, Paroxetine, Sertraline	Increase extracellular serotonin by limiting its reabsorption	-Sexual dysfunction -Withdrawal -Insomnia -Hyponatraemia	-Safe in overdose -May increase suicide risk
Serotonin-noradrenaline reuptake inhibitors (SNRIs)	Duloxetine, Venlafaxine	Increase extracellular serotonin and noradrenaline by limiting their reabsorption	-Similar to SSRIs -May elevate blood pressure	
Tricyclic antidepressants (TCAs) No longer recommended	Amitriptyline	Block serotonin and noradrenaline transporters resulting in elevation in their synaptic concentrations	-Anti-muscarinic effects (dry mouth, constipation, blurred vision, urinary retention) -Hyponatraemia	-Dangerous in overdose
Monoamine oxidase inhibitors (MAOIs) Rarely used	Moclobemide, Phenelzine, Selegiline	Inhibits monoamine oxidase (an enzyme that oxidises monoamines to inactivate them)	-**H**ypertension -**H**epatocellular jaundice -**H**yperthermia	-"Cheese effect": if tyramine containing foods (e.g. cheeses, cured meats) are ingested while on MAOIs, they may trigger a hypertensive crisis

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Cholesterol lowering drugs

Drug class	Drug name	Mechanism	Indications	Side effects	Notes
Statin 1st line	Atorvastatin, Fluvastatin, Pravastatin, Rosuvastatin, Simvastatin	Inhibit HMG-CoA reductase (enzyme involved in hepatic cholesterol synthesis)	-Any vascular disease -Lipid disorder -QRISK2 score ≥10% -T1 diabetic if >40y/had diabetes >10y/ nephropathy/CVS risk factors -Chronic kidney disease -Ratio of total cholesterol:HDL ≥6	-Myalgia and rhabdomyolysis -Hepatotoxicity and increased liver enzymes	-Most effective at lowering LDL-cholesterol (but less effective than fibrates at reducing triglyceride levels)
Ezetimibe 2nd line	Ezetimibe	Decreases cholesterol absorption in small intestine	-Primary hypercholesterolaemia if statin not tolerated or contraindicated (2nd line) -In conjunction with statin if statin fails to control total cholesterol or LDL-cholesterol alone	-Headache -Diarrhoea (steatorrhoea)	-Can be used with statins
Fibrates 3rd line (or 1st for isolated triglyceraemia)	Bezafibrate, Ciprofibrate, Fenofibrate, Gemfibrozil	Act in liver to reduce cholesterol synthesis, reduce vLDL secretion and increase their removal from blood, and increase plasma HDL	-Isolated triglyceridaemia (>10mmol/L) -Hypercholesterolaemia if statin not tolerated or contraindicated (3rd line)	-GI disturbance -Myalgia and rhabdomyolysis	-Most effective at reducing triglyceride levels -Not to be used with statins

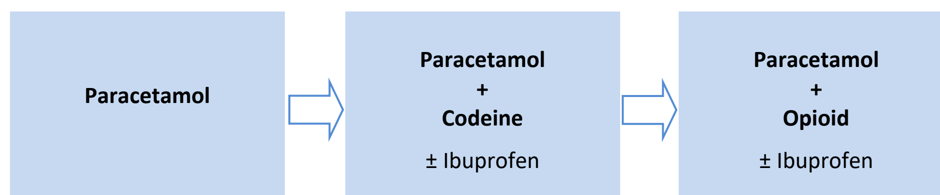
Heart failure

- 1st line: **ACE-inhibitor + beta-blocker**, **+ diuretic** (e.g. furosemide, bumetanide) if peripheral/pulmonary oedema
- 2nd line: add aldosterone antagonist (e.g. spironolactone, eplerenone)
- 3rd line: add digoxin

Anti-coagulants

See anti-coagulants page

Analgesic ladder



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CONTRACEPTIVE METHODS						
Method	**Contraindications**	**How it works**	**Treatment course**	**Side effects / Risks / Effect on cycle**	**Positives vs negatives**	**Comments**
Combined oral contraceptive pill *2nd gen (Microgynon, Rigevidon), 3rd gen (Marvelon, Yasmin, Cilest), 4th gen (Glaira)* **Combined contraceptive patch** *Evra* **Combined contraceptive vaginal ring** *NuvaRing* 99% effectiveness	**Absolute:** Smoker >35 years, <6/52 postpartum, breast feeding, hypertensive, current or past VTE Hx, migraine with aura, CVD, current breast ca, liver cirrhosis **Relative:** adequately controlled hypertension, migraine >35, BMI>35, enzyme inducing medications	•Stops ovulation •↑cervical mucus *(i.e. a mechanical barrier to sperm)* •Thins endothelium *(i.e. reduces change of implantation)*	**Pill:** take daily (3 weeks on, 1 week pill-free) **Patch:** change weekly (one patch-free week per month) **Ring:** leave in for 3 weeks then one ring-free week	Hormonal SEs* Blood clots (especially for higher generation COCPs Increased risk of breast/ cervical cancer Periods may become lighter Local irritation from the patch Pain from the ring during intercourse- can be removed if uncomfortable but only for a maximum 3 hours	+ controls periods, bleeding and pain	•Start on day 1 of cycle •Reduced risk of endometrial and ovarian cancer •MISSED PILL→ take ASAP (even with next one). If next on time, it's fine. If miss two, take one pill immediately use a condom for 7 days. Further management depends on week: *1st week of packet:* will need emergency contraception if had sex in pill-free interval or 1st week of pill packet *2nd week:* no action *3rd week:* omit the pill-free week -7 day (condom) rule for: D&V, enzyme inducing drugs
Progesterone only pill *Cerazette* 99% effectiveness	Forgetfulness; breast cancer; undiagnosed PV bleeding; liver disease	•↑cervical mucus •Thins endothelium	Take daily at same time (no breaks)	Hormonal SEs* Periods → stop/irregular/lighter/more frequent	- must remember to take at an exact time	•Start on day 1 of cycle •Must be taken at same time each day •MISSED PILL → take ASAP (even with next one). But if >3 hours late (or >12hours late for Cerazette), use condom for 2 days, and consider emergency contraception if had sex in the 2-3 days before missed pill or had sex since the missed pill.
Intra-uterine device *Copper coil* 99% effectiveness	Pelvic infection; PID <3months ago; gynae cancer; small uterine cavity; undiagnosed PV bleeding; copper allergy (for IUD)	Copper acts as spermicide and also causes intra-uterine inflammation	Lasts for 5 years (3years for the jaydess)	Coil insertion risks* Periods may be heavier	+ can forget about it - heavy periods	•Check for string monthly •STI check before inserting •Put in anytime if not had sex since period, or within first 5 days of start of period •If fitted >40y (IUD)/ >45y (IUS), can stay in place until menopause
Intra-uterine system *Mirena or Jaydess for younger women* 99++% (best)		•Stops ovulation •↑cervical mucus •Thins endothelium		Coil insertion risks* Spotting in first 6months then periods → light/stop in some women	+ can forget about it + reduces dysmenorrhoea/ menorrhagia - Some continue to have unpredictable spotting	
Progesterone implant *Implanon* 99% effectiveness	Liver/genital/breast cancer; liver disease; undiagnosed PV bleeding; on enzyme inducers		Lasts for 3 years	Hormonal SEs* Insertion risks (bruising, infection, scarring, expulsion) Periods → stop/irregular/longer	+ can forget about it - Some continue to have unpredictable spotting	•Placed under skin of inner upper arm (4cm long) under local anaesthetic •Can feel it
Progesterone injection *Depo-Provera* 99% effectiveness			Lasts for 3 months	Hormonal SEs* Periods → stop/irregular/longer Weight gain Time for fertility to return Osteoporosis (>2y consider, >5y stop)	- must remember to come back every 3 months - time for fertility to return - once given cannot remove, so side effects may last 3 months	
Vasectomy 1 in 2000 fail	May consider children in future	Vas deferens cut and tied via forceps trough skin or 2x 1cm cuts in scrotum. Local anaesthetic. Takes 20 mins.	Single operation	Failure (1 in 2000), bleeding/bruising, infection Swollen scrotum for a few days Sperm granulomas may form if leaks Chronic testicular pain (1-3%)	+ long term - consider as irreversible (50%) - surgical risks	•Can take up to 3 months for remaining sperm to be used up •Sperm sample at 8 weeks, then 2-4 weeks later (both must be -ve) •Can have sex (with condom) whenever feel ready
Tubal ligation 1 in 200 fail		Fallopian tubes clipped laproscopically under general anaesthetic	Single operation	Anaesthetic risk, failure (1 in 200), bleeding/bruising, infection		
Condom 98% effectiveness	Allergy to ingredients (latex-free are available)	Physical barrier	New condom each time have sex	Small risk of allergy May slip off/break	+ stops STI transmission - interrupts sex	•Only method which stops STI transmission •Oil based products damage latex

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***Hormonal SEs** = Weight gain, acne, mood changes, headache *__Coil insertion risks__ = infection in first 3 weeks, bleeding, perforation 1in1000, expulsion 5%, vasovagal 1in10

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