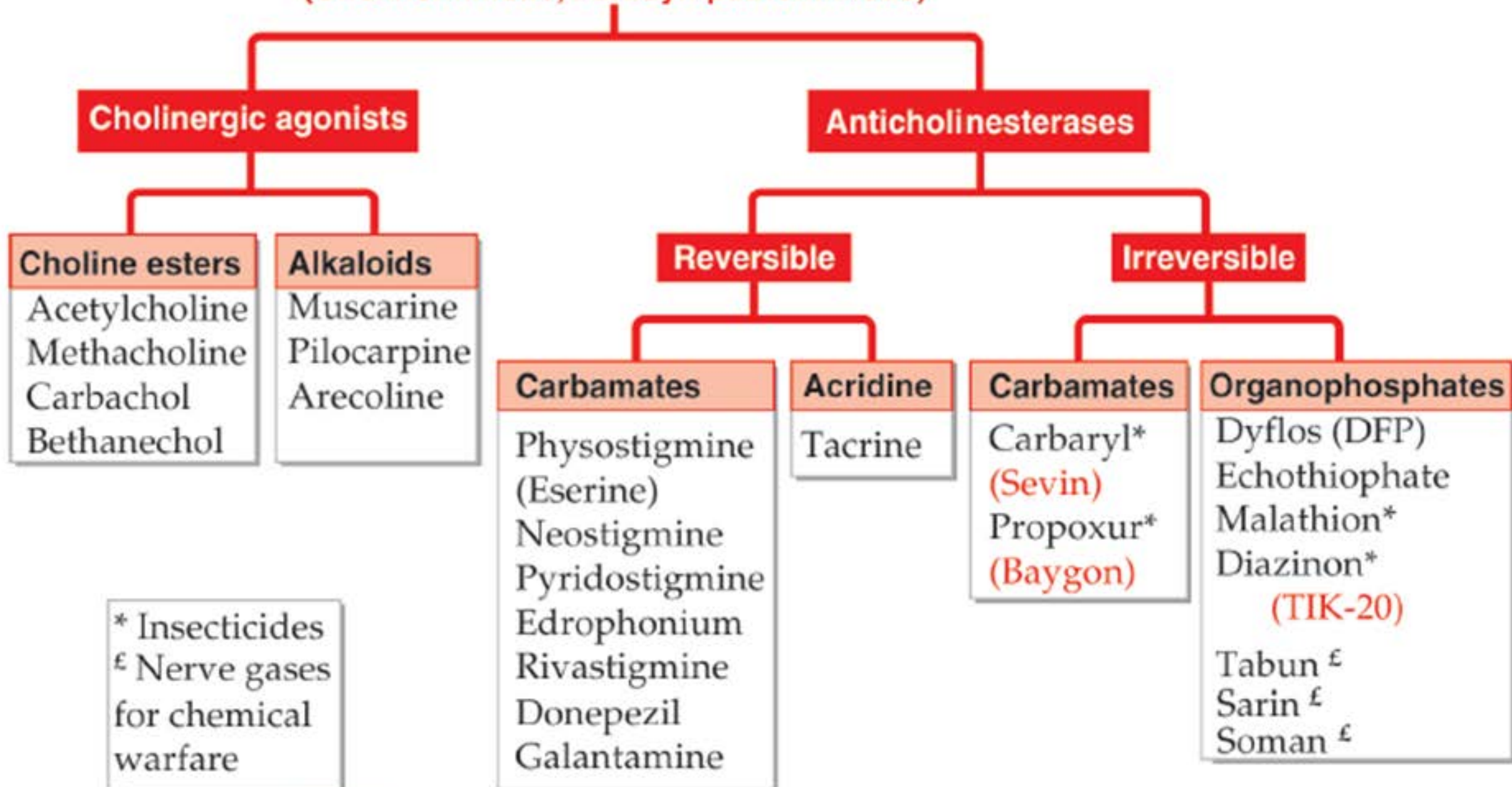


Classification of Drugs

Drug Acting on Autonomic Nervous system

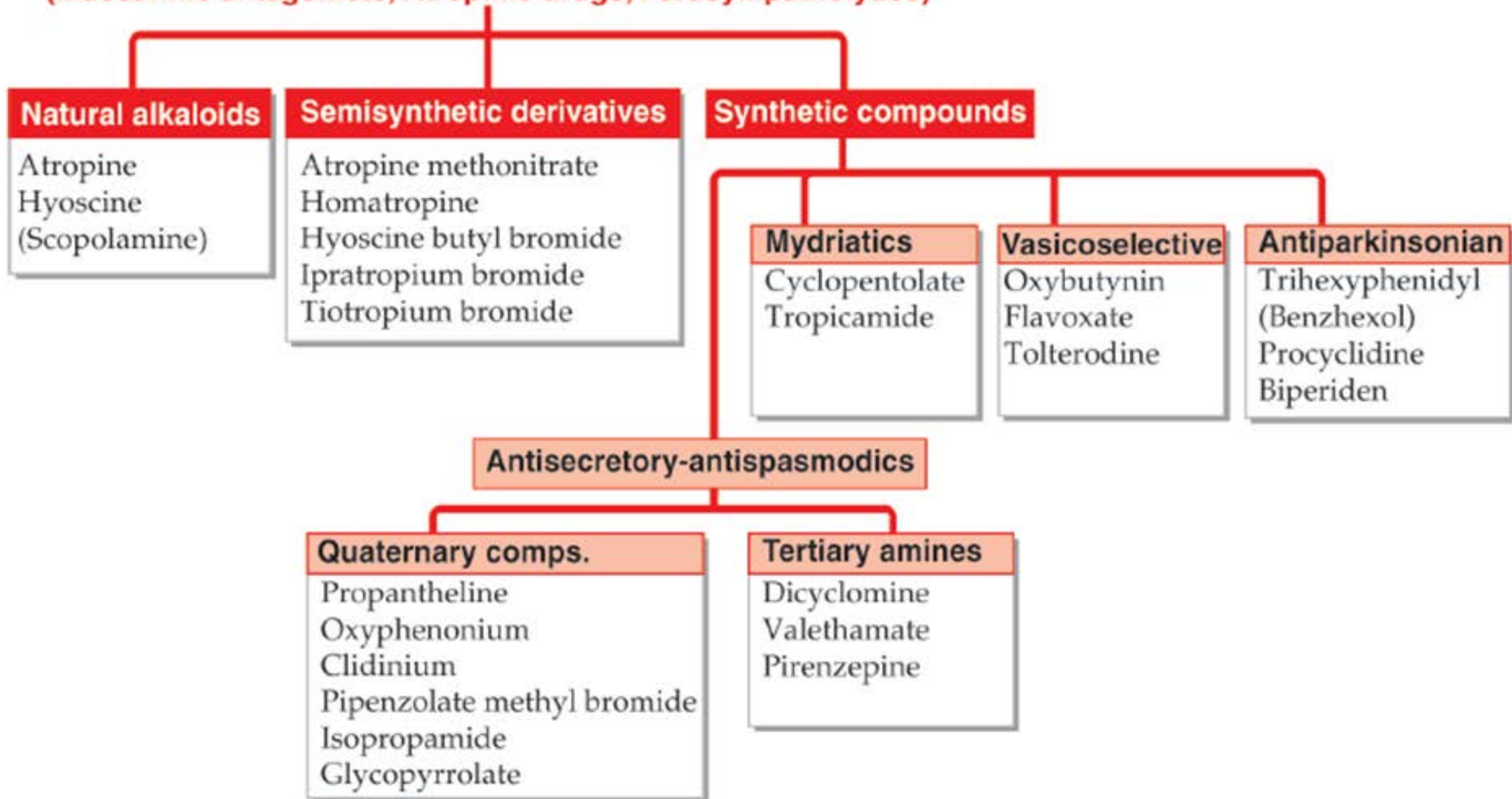
CHOLINERGIC DRUGS (Cholinomimetic, Parasympathomimetic)



Anticholinergic Drugs

ANTICHOLINERGIC DRUGS

(Muscarinic antagonists, Atropinic drugs, Parasympatholytics)



Ganglionic Stimulants and Block Agents

GANGLIONIC STIMULANTS

Selective nicotinic agonists

Nicotine (small dose)
Lobeline
Dimethyl phenyl piperazinium (DMPP)
Tetramethyl ammonium (TMA)
Varenicline

Nonselective/muscarinic agonists

Acetylcholine
Carbachol
Pilocarpine
Anticholinesterases
MCN 343-A

GANGLIONIC BLOCKING AGENTS

Competitive blockers

Persistent depolarizing blockers

Nicotine (large dose)
Anticholinesterases (large dose)

Quaternary ammonium comps.

Hexamethonium
Pentolinium

Amines

Mecamylamine
Pempidine

Monosulfonium comp.

Trimethaphan-camforsulfonate

Adrenergic Drugs

ADRENERGIC DRUGS (Sympathomimetics)

Pressor agents

Noradrenaline
(Norepinephrine)
Ephedrine
Dopamine
Phenylephrine
Methoxamine
Mephentermine

Bronchodilators

Isoprenaline
Salbutamol
(Albuterol)
Terbutaline
Salmeterol
Formoterol
Bambuterol

CNS stimulants

Amphetamine
Dexamphetamine
Methamphetamine
Methylphenidate

Uterine relaxants

Ritodrine
Isoxsuprine
Salbutamol
Terbutaline

Cardiac stimulants

Adrenaline
Isoprenaline
Dobutamine

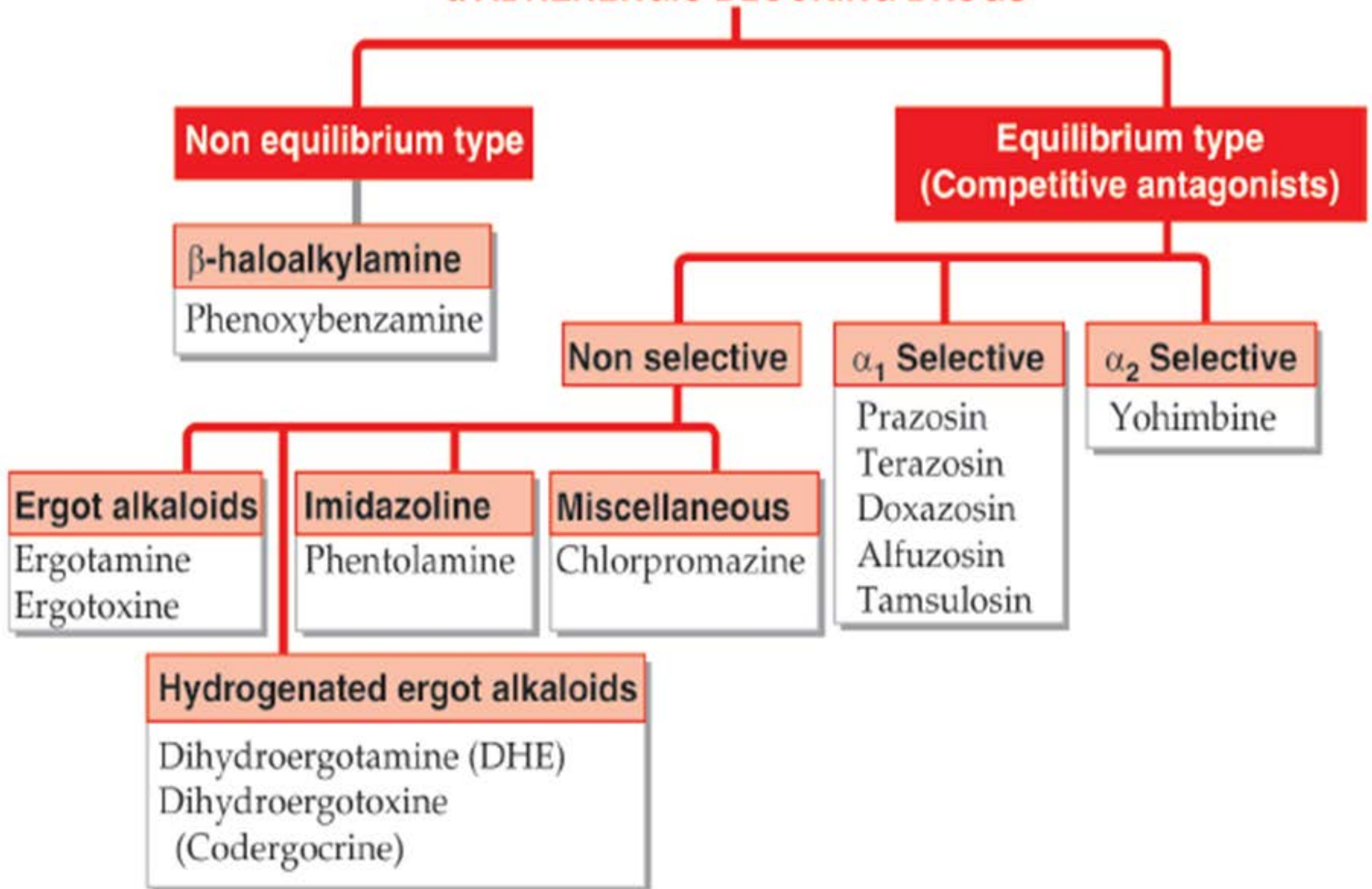
Nasal decongestants

Xylometazoline
Oxymetazoline
Naphazoline
Phenylephrine
Phenylpropanolamine
Pseudoephedrine

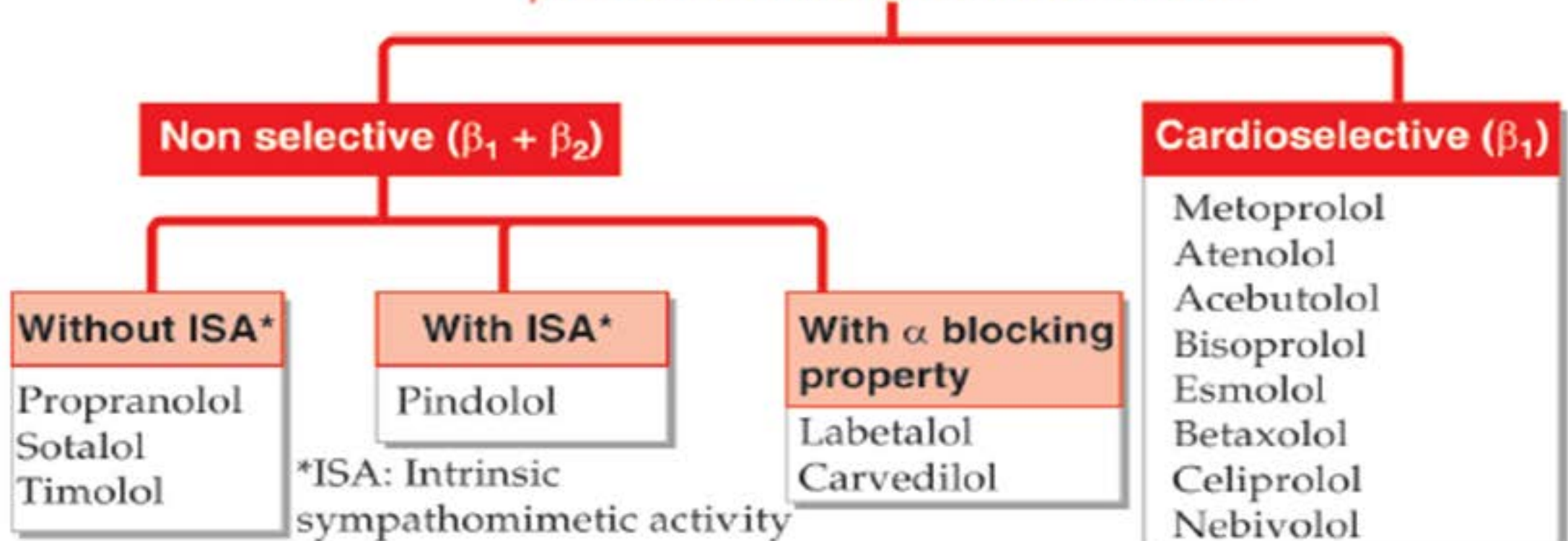
Anorectics

Amphetamine
Fenfluramine
Dexfenfluramine
Sibutramine

α ADRENERGIC BLOCKING DRUGS

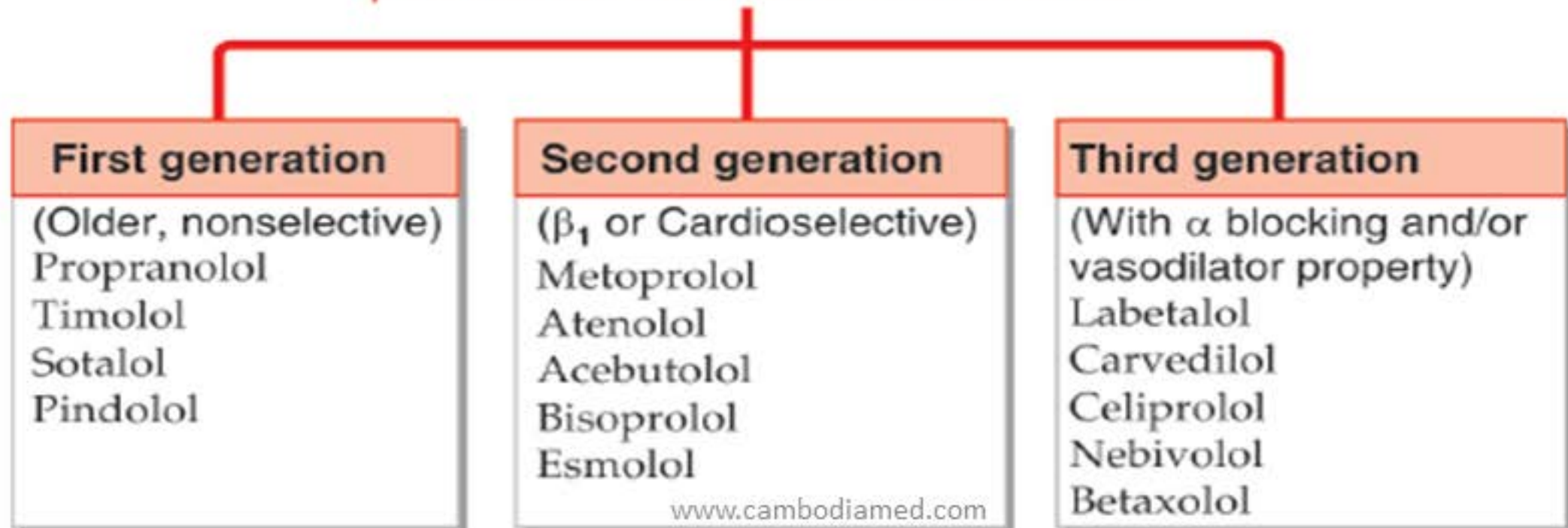


β ADRENERGIC BLOCKING DRUGS

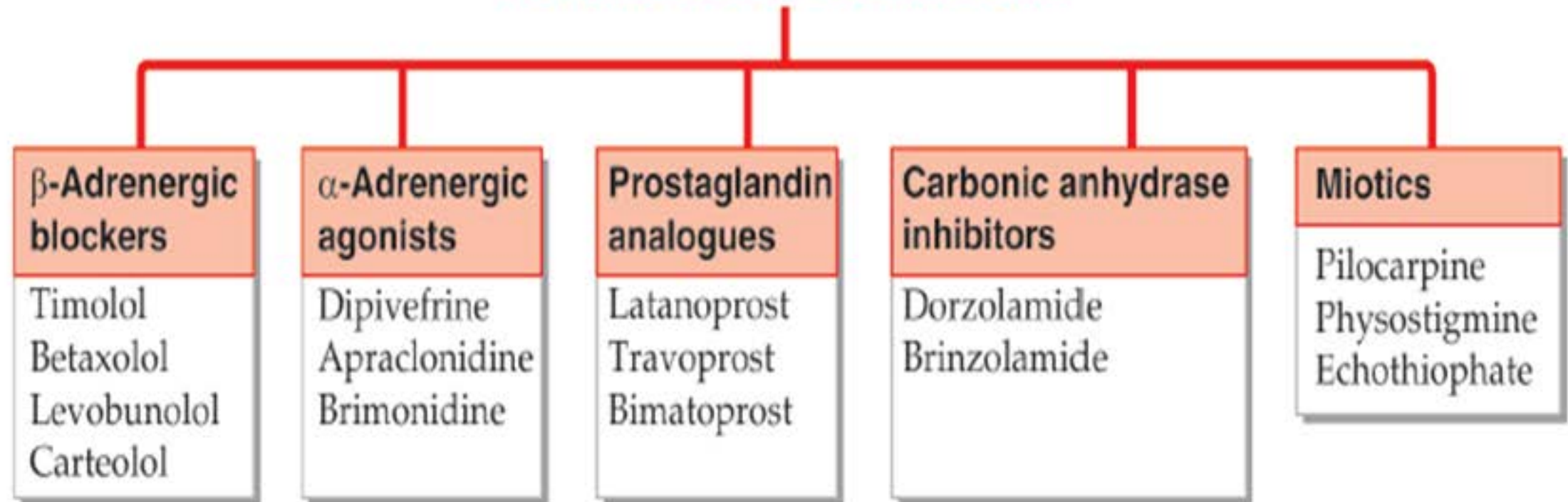


GENERATIONWISE CLASSIFICATION

β ADRENERGIC BLOCKING DRUGS



TOPICAL DRUGS FOR GLAUCOMA



Preparations

1. Timolol: Start with 0.25% eye drops BD, change to 0.5% drops in case of inadequate response. 0.5% OD as gel forming solution. **GLUCOMOL, OCUPRES, IOTIM, LOPRES 0.25% and 0.5% eye drops. TIMOLAST 0.5% gel forming eye drops (long acting).**

Timolol 0.5% + Latanoprost 0.005%: **LAPROST PLUS, LATOCHEK-T eye drops.**

2. Betaxolol: 0.5% topically in eye BD; **OPTIPRES, IOBET, OCUBETA 0.5% eye drops.**
3. Levobunolol: 0.5% topically in eye OD; **BETAGAN 0.5% ophthalmic solution.**
4. Dipivefrine: 0.1% topically in eye BD; **PROPINE 0.1% eye drops.**
5. Apraclonidine: 0.5–1.0% topically in eye; **ALFADROPS-DS 1% eye drops.**
6. Brimonidine: 0.2% topically in eye TDS;
ALPHAGAN-P, BRIMODIN-P 0.15% eye drops, IOBRIM 0.2% eye drops.

Autacoid and Related Drugs

HISTAMINERGIC AGONISTS

Nonselective agonists (H₁ + H₂ + H₃)

Histamine
Betahistine

Selective H₁ agonists

2-Methyl histamine
2-Pyridyl ethylamine
2-Thizolyl ethylamine

Selective H₂ agonists

Dimaprit
Impromidine

Selective H₃ agonists

(R) α -Methylhistamine
Imetit

H₁ ANTAGONISTS (Conventional antihistaminics)

Highly sedative

Diphenhydramine
Dimenhydrinate
Promethazine
Hydroxyzine

Moderately sedative

Pheniramine
Cyproheptadine
Meclozine
Cinnarizine

Mildly sedative

Chlorpheniramine
Dexchlorpheniramine
Triprolidine
Clemastine

Second generation (nonsedating) anti- histaminics

Fexofenadine
Loratadine
Desloratadine
Cetirizine
Levocetirizine
Azelastine
Mizolastine
Ebastine

5-HYDROXY TRYPTAMINE (5-HT) ANTAGONISTS

```
graph TD; A[5-HYDROXY TRYPTAMINE (5-HT) ANTAGONISTS] --- B[Nonselective antagonists & partial agonists/antagonists]; A --- C[5-HT2 Antagonists]; A --- D[5-HT3 Antagonists];
```

Nonselective antagonists & partial agonists/antagonists

Ergotamine
Lysergic acid diethyl
amide (LSD)
2-Bromo LSD
Methysergide
Cyproheptadine
Cinnarizine

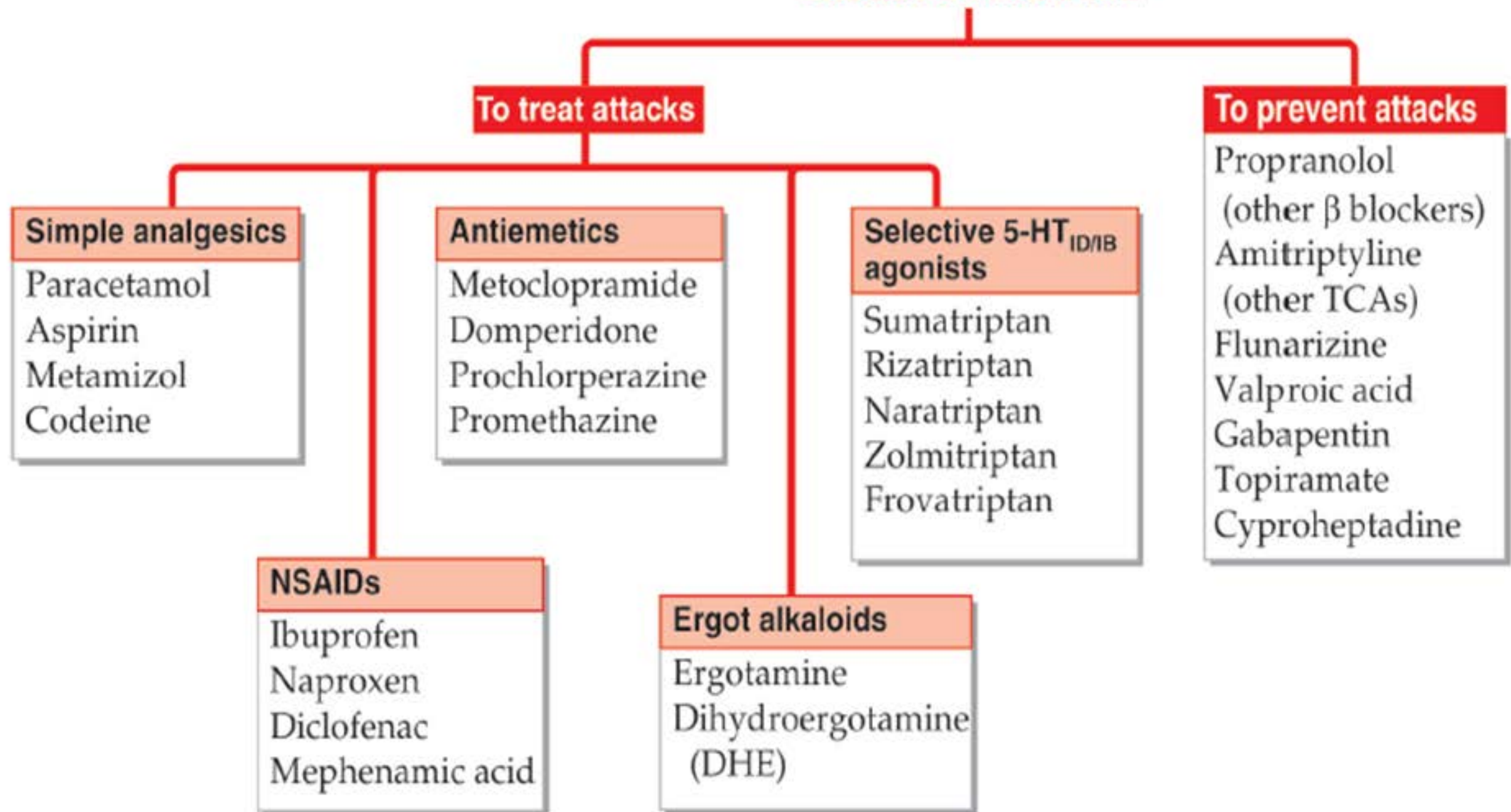
5-HT₂ Antagonists

Ketanserin
Ritanserin
Clozapine
Risperidone

5-HT₃ Antagonists

Ondansetron
Granisetron
Tropisetron
Palonosetron
Ramosetron

DRUGS FOR MIGRAINE



PROSTAGLANDINS (PGs)



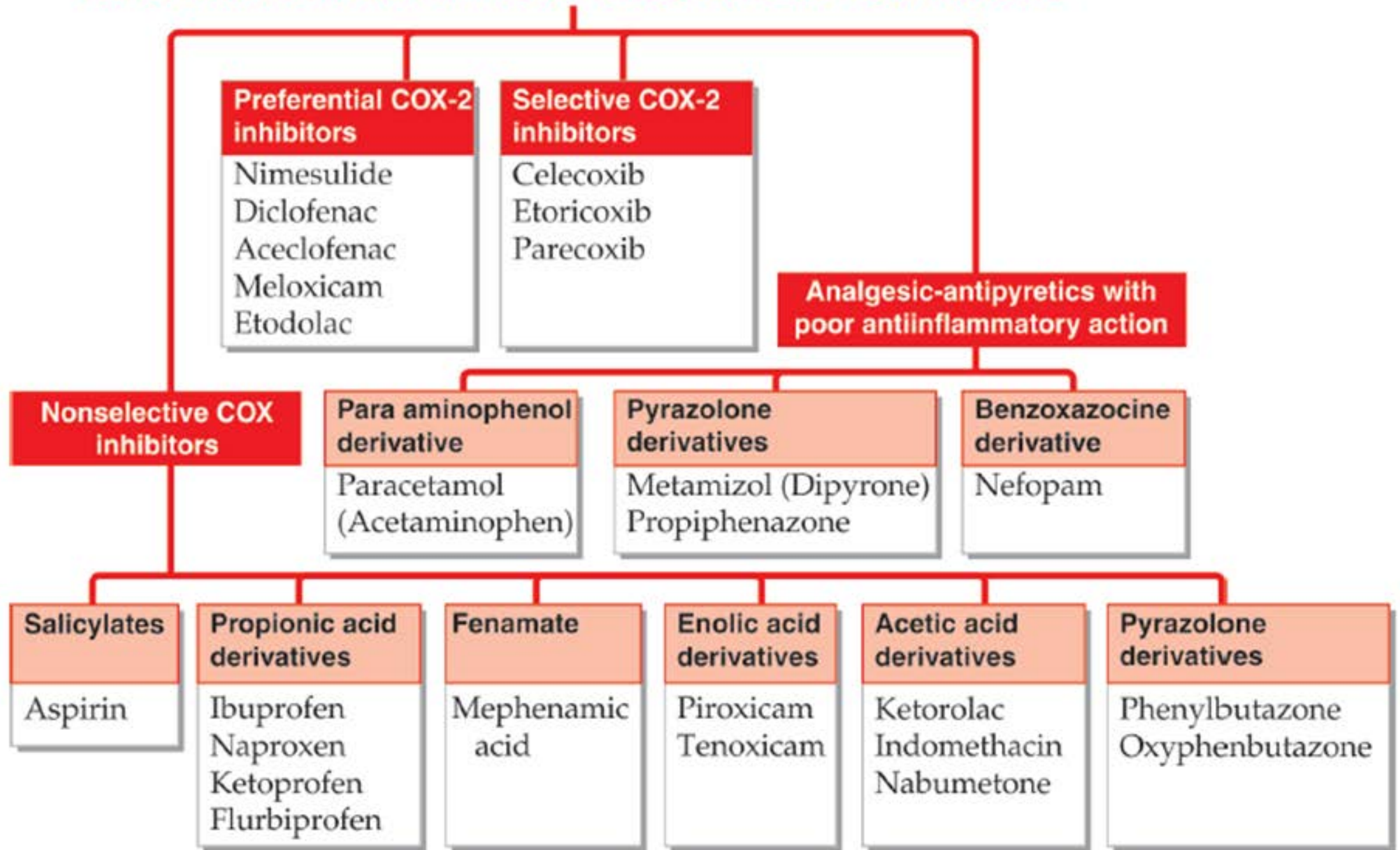
Natural PGs

Dinoprostone (PGE_2)
Gemeprost
Dinoprost ($\text{PGF}_{2\alpha}$)
Alprostadil (PGE_1)
Prostacyclin (PGI_2)
(Epoprostenol)

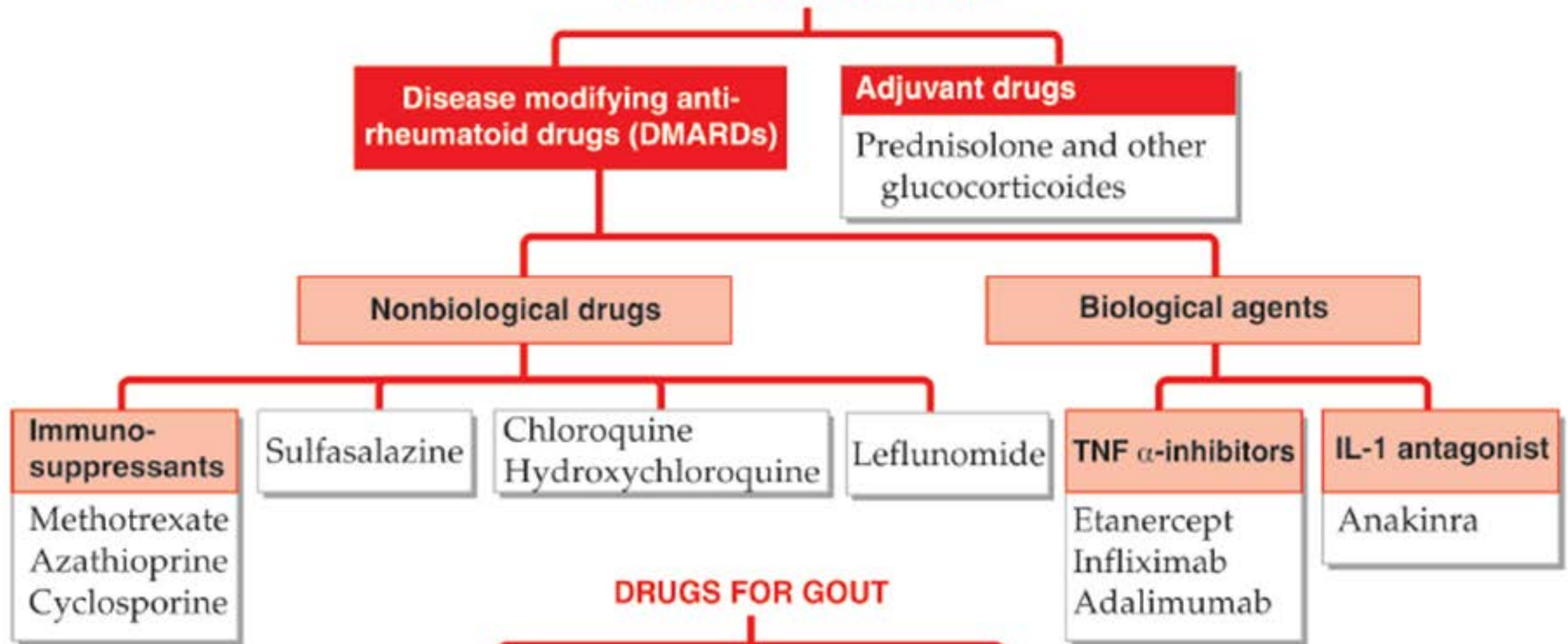
Prostaglandin analogues

Carboprost (15-methyl $\text{PGF}_{2\alpha}$)
Misoprostol (methyl PGE_1 ester)
Latanoprost (PGE_2 analogue)
Travoprost
Bimatoprost

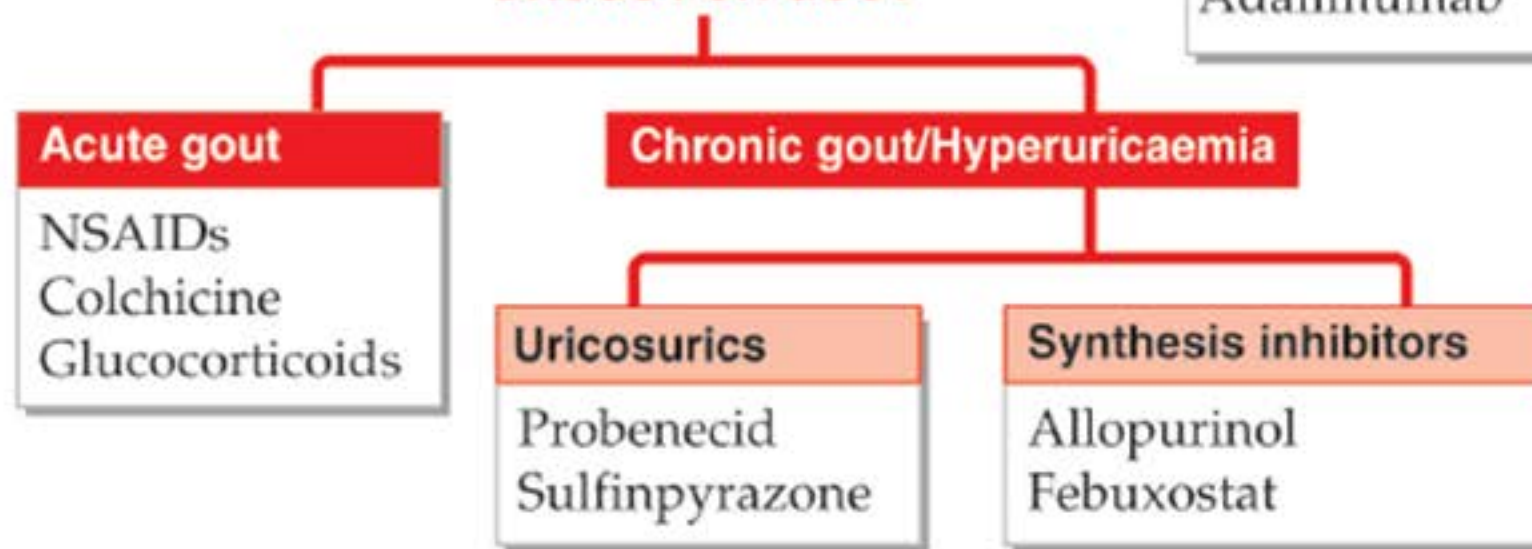
NONSTEROIDAL ANTIINFLAMMATORY DRUGS/ANTIPYRETIC-ANALGESICS



ANTIRHEUMATOID DRUGS

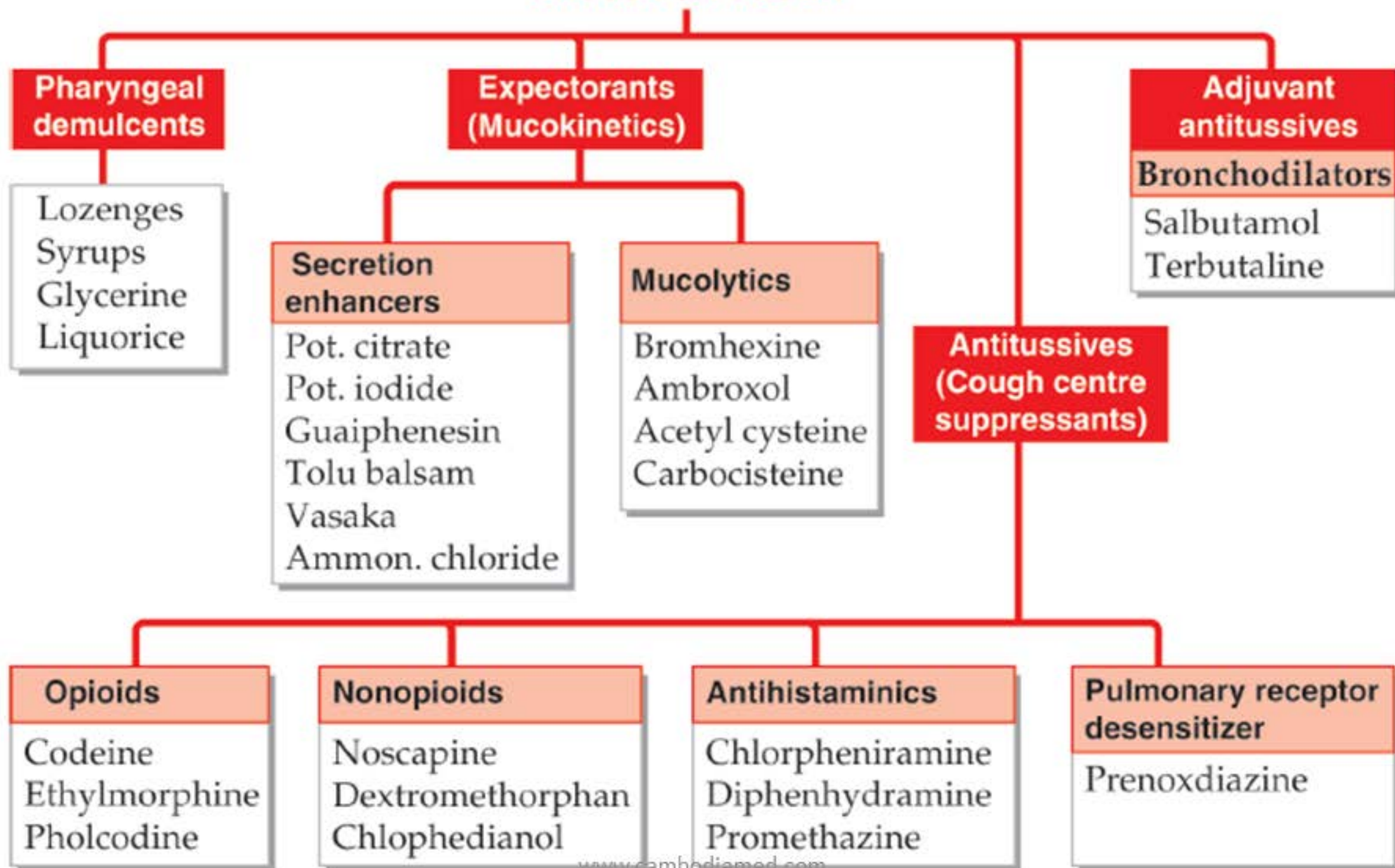


DRUGS FOR GOUT

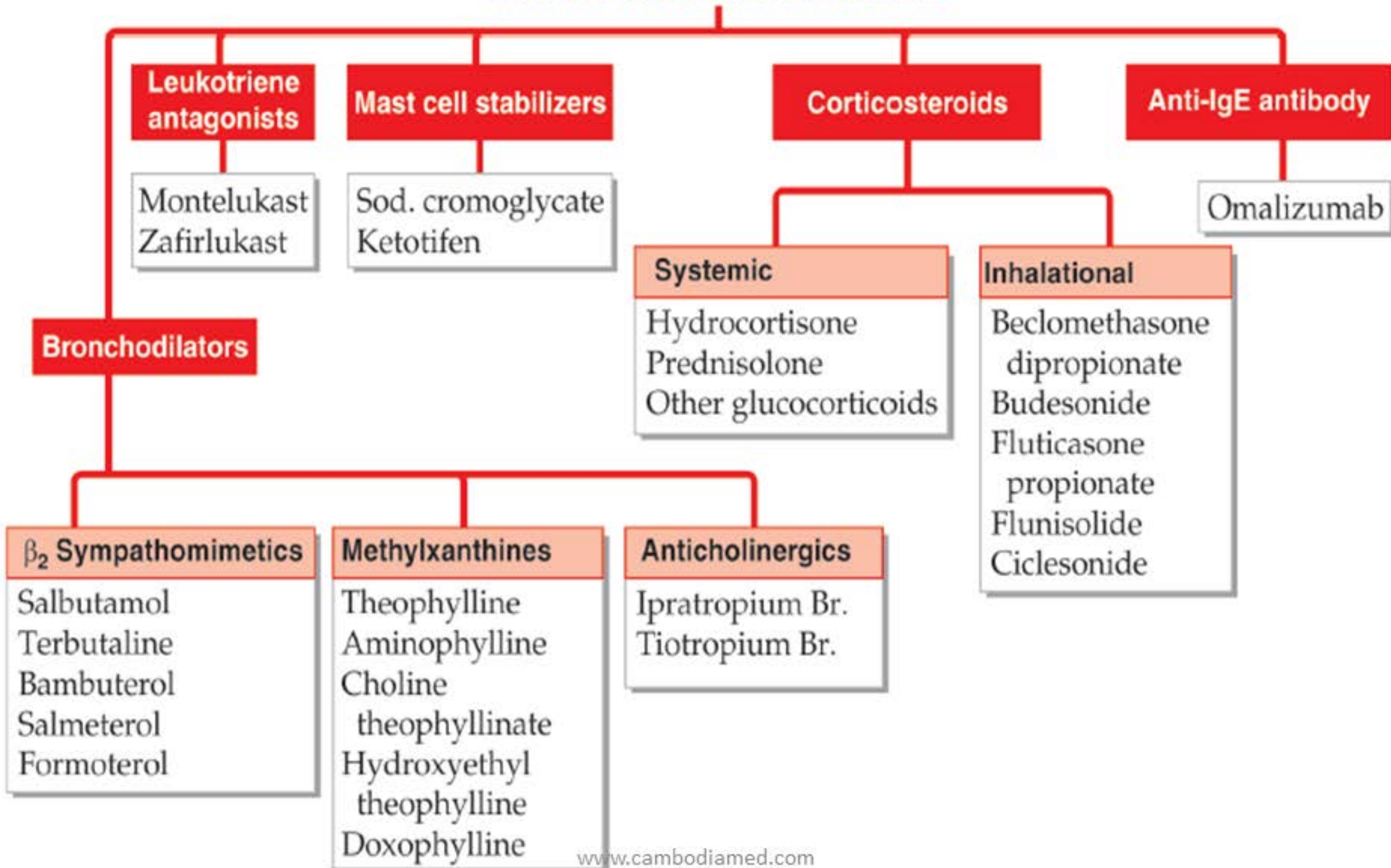


Drugs for Respiratory Disorder

DRUGS FOR COUGH



DRUGS FOR BRONCHIAL ASTHMA



Hormones and Related Drugs

ANTERIOR PITUITARY HORMONES

From acidophil cells

Growth hormone (GH)
Prolactin

From basophil cells

Thyroid stimulating hormone (TSH)
Adrenocorticotrophic hormone (ACTH)
Follicle stimulating hormone (FSH)
Luteinizing hormone (LH)

DRUGS ALTERING ANTERIOR PITUITARY HORMONE SECRETION

Inhibit GH release

Somatostatin
Octreotide
Lanreotide

Inhibit prolactin release

Bromocriptine
Cabergoline
Apomorphine

Enhance prolactin release

Chlorpromazine
(other neuroleptics)
Metoclopramide
Reserpine

Inhibit gonadotropin (Gn) release

Superactive GnRH agonists

(Initially enhance Gn release)
Nafarelin
Triptorelin
Goserelin
Leuprolide

www.cambodiamed.com

GnRH antagonists

Ganirelix
Cetrorelix

Thyroid hormone

Thyroxine (T_4)
Triiodothyronine (T_3 , Liothyronine)

THYROID INHIBITORS

Inhibit hormone synthesis

(Antithyroid drugs)
Propylthiouracil
Methimazole
Carbimazole

Inhibit iodide trapping

(Ionic inhibitors)
Thiocyanates ($-SCN$)
Perchlorates ($-ClO_4$)
Nitrates ($-NO_3$)

Inhibit hormone release

Iodine
Iodides of Na, K
Organic iodide

Destroy thyroid tissue

Radioactive iodine ^{131}I

INSULINS

```
graph TD; INSULINS --> Rapid_acting[Rapid acting]; INSULINS --> Short_acting[Short acting]; INSULINS --> Intermediate_acting[Intermediate acting]; INSULINS --> Long_acting[Long acting];
```

Rapid acting

(Insulin analogues)
Insulin lispro
Insulin aspart
Insulin glulisine

Short acting

Regular (soluble)
insulin

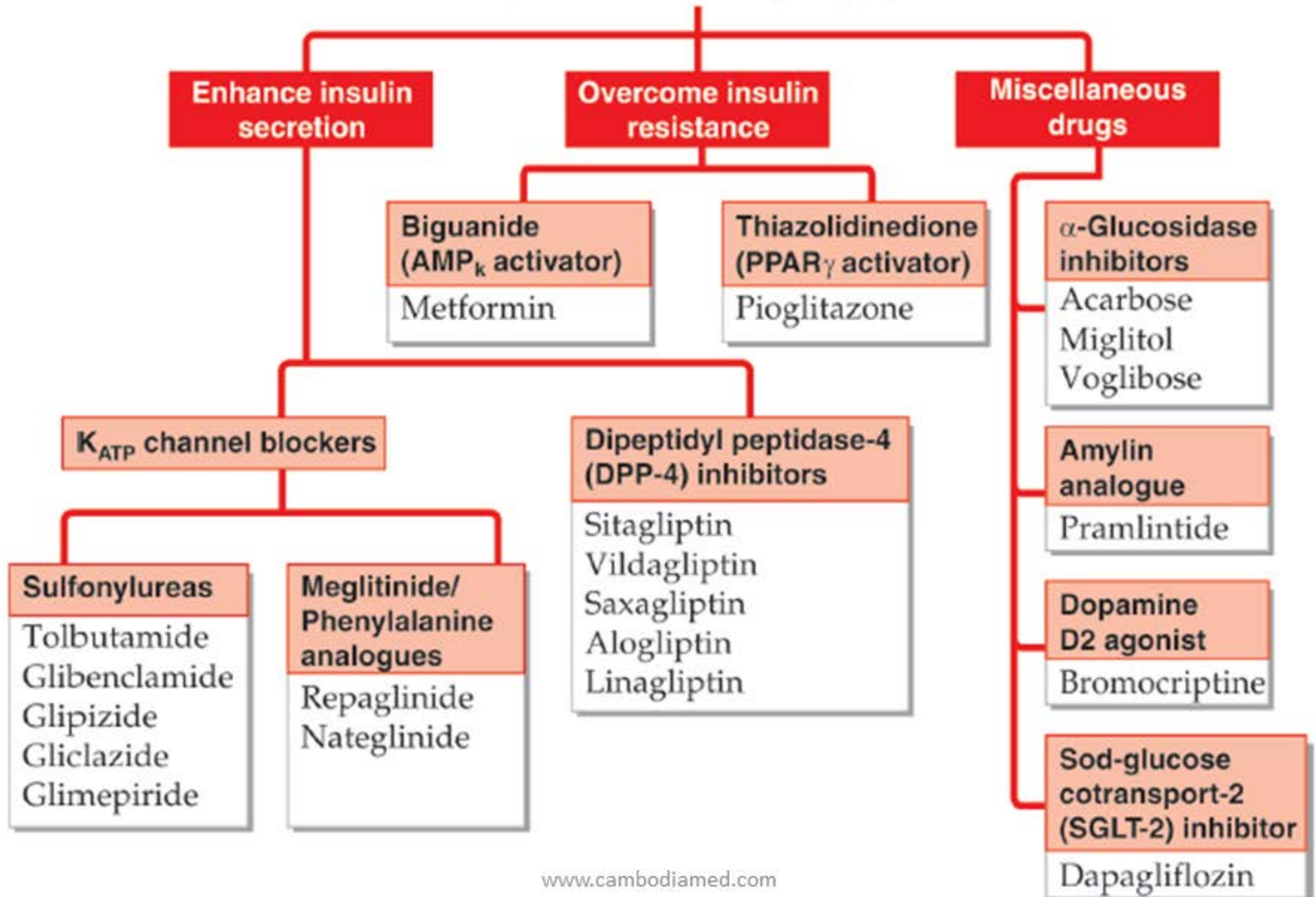
Intermediate acting

Insulin zinc suspension
(Lente insulin)
Neutral protamine hagedorn
(NPH) or Isophane insulin

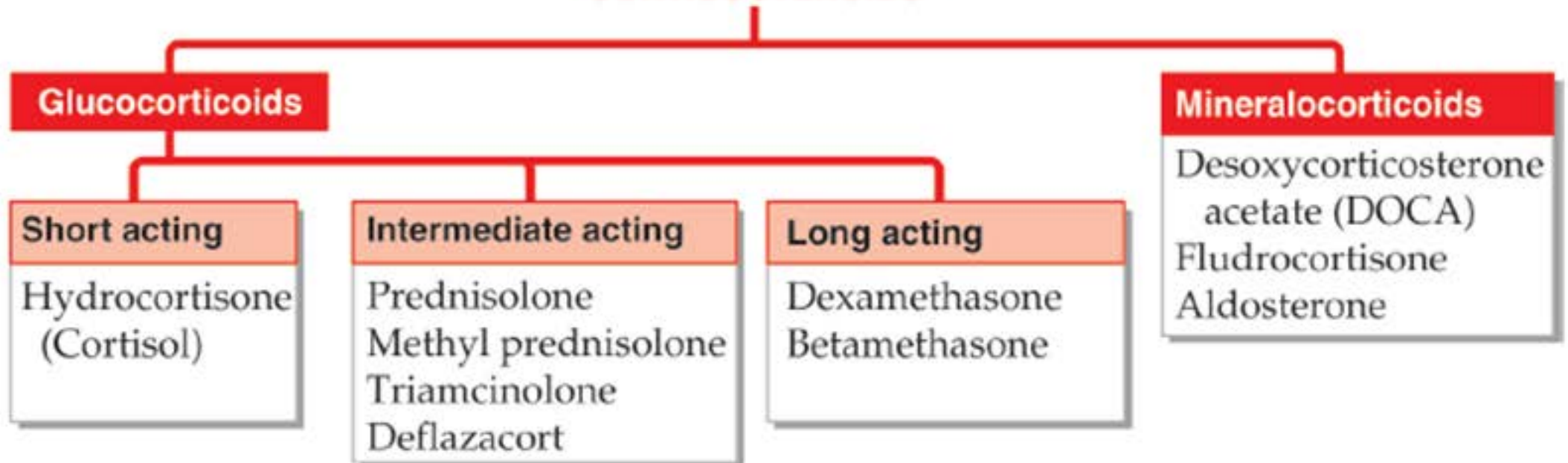
Long acting

(Insulin analogues)
Insulin glargine
Insulin detemir

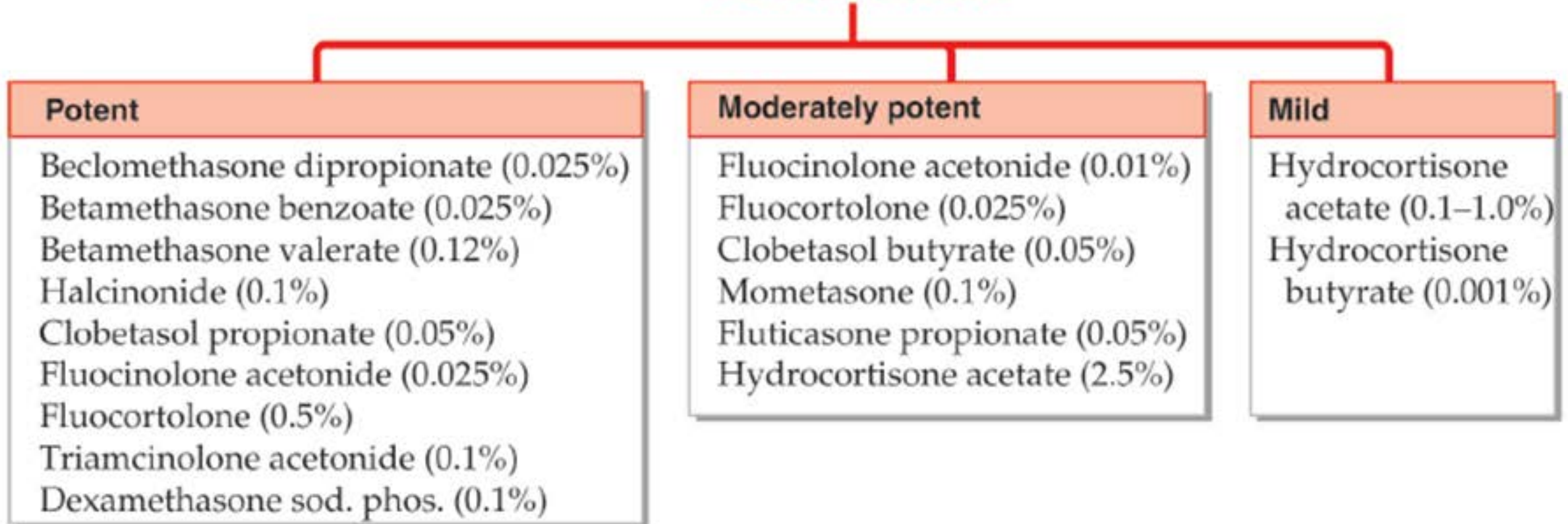
ORAL ANTIDIABETIC DRUGS



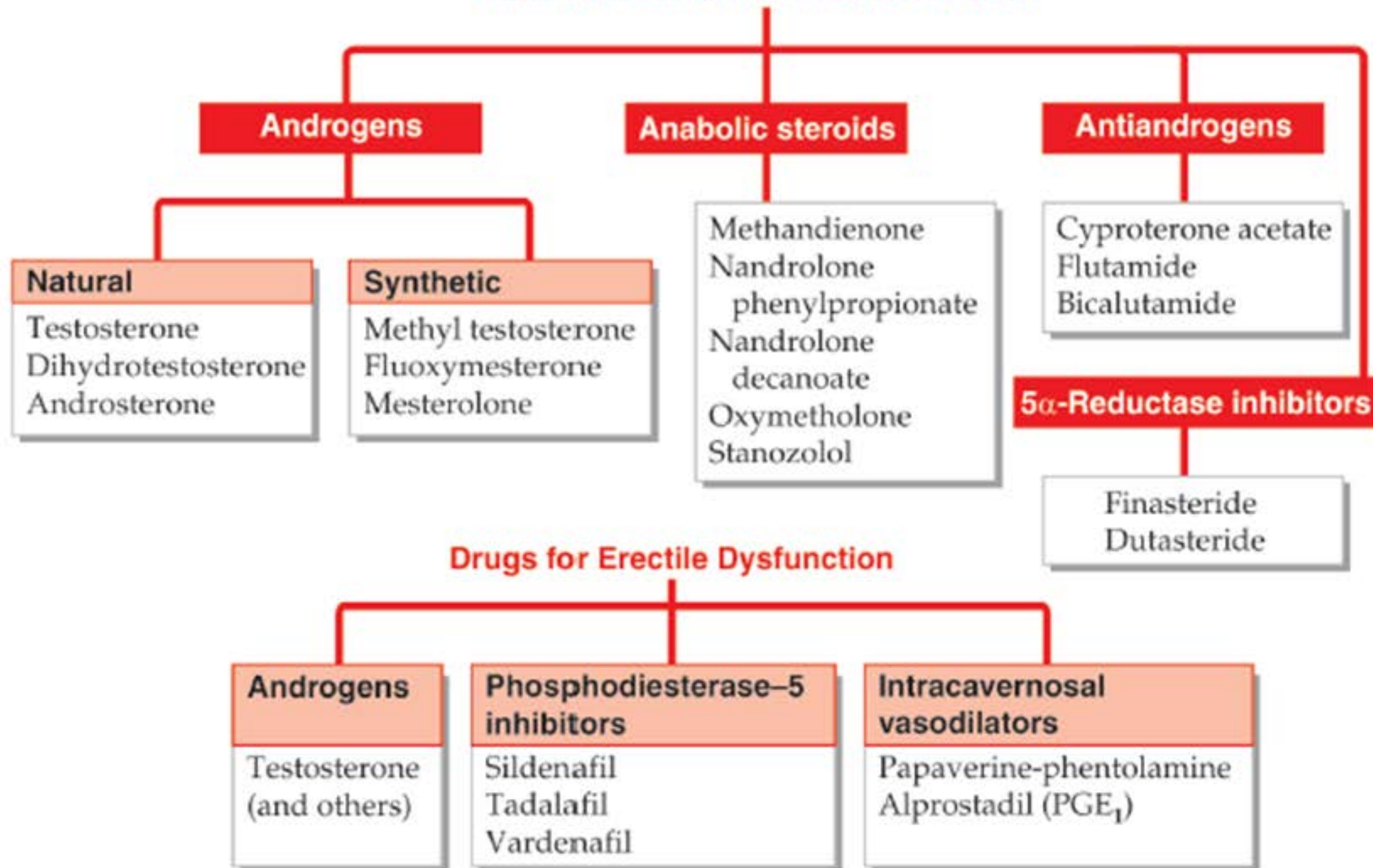
CORTICOSTEROIDS



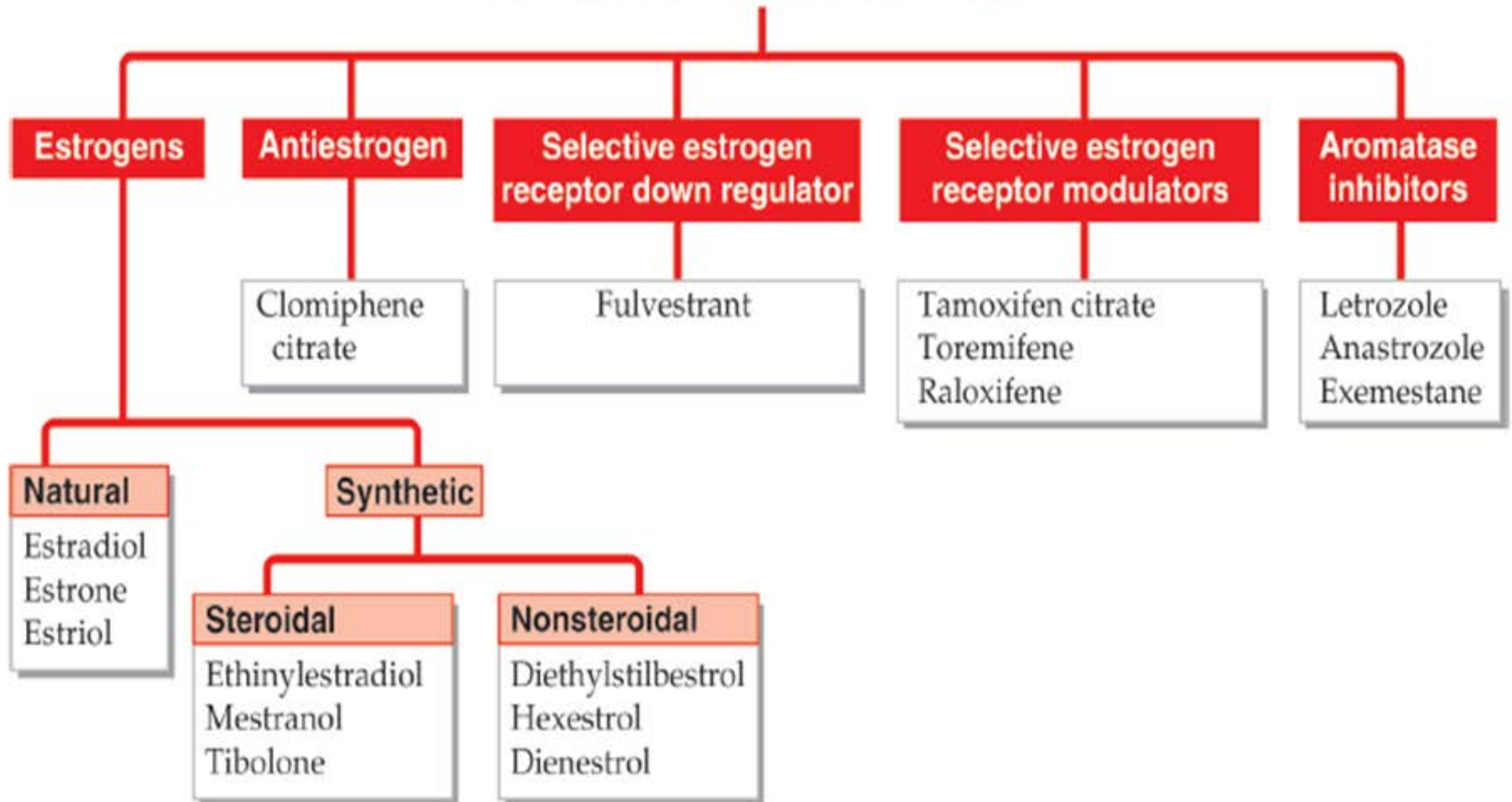
TOPICAL STEROIDS



ANDROGENS AND RELATED DRUGS



ESTROGENS AND RELATED DRUGS



PROGESTINS

Progesterone derivatives

Medroxy progesterone acetate
Megestrol acetate
Dydrogesterone
Hydroxy progesterone caproate
Nomegestrol acetate

19-Nortestosterone derivatives

Estranes

Norethindrone
(Norethisterone)
Lynestrenol
(Ethinylestrenol)
Allylestrenol

Gonanes

Levonorgestrel
Desogestrel
Norgestimate
Gestodene

Antiprogestin

Mifepristone

Selective progesterone receptor modulator

Ulipristal

HORMONAL CONTRACEPTIVES

Oral

Combined pills

- Norgestrel (0.5 mg) + Ethinylestradiol (50 µg)
- Levonorgestrel (0.1 – 0.25 mg) + Ethinylestradiol (20 – 50 µg)
- Desogestrel (0.15 mg) + Ethinylestradiol (20 – 30 µg)

Phased pills

- Levonorgestrel (50 µg – 75 µg – 125 µg) + Ethinylestradiol (30 µg – 40 µg – 30 µg)
- Norethindrone (0.5 mg – 0.75 mg – 1.0 mg) + Ethinylestradiol (35 µg)

Postcoital pills

- Levonorgestrel (1.5 mg)
- Levonorgestrel (0.5 mg) + Ethinylestradiol (100 µg) × 2 doses

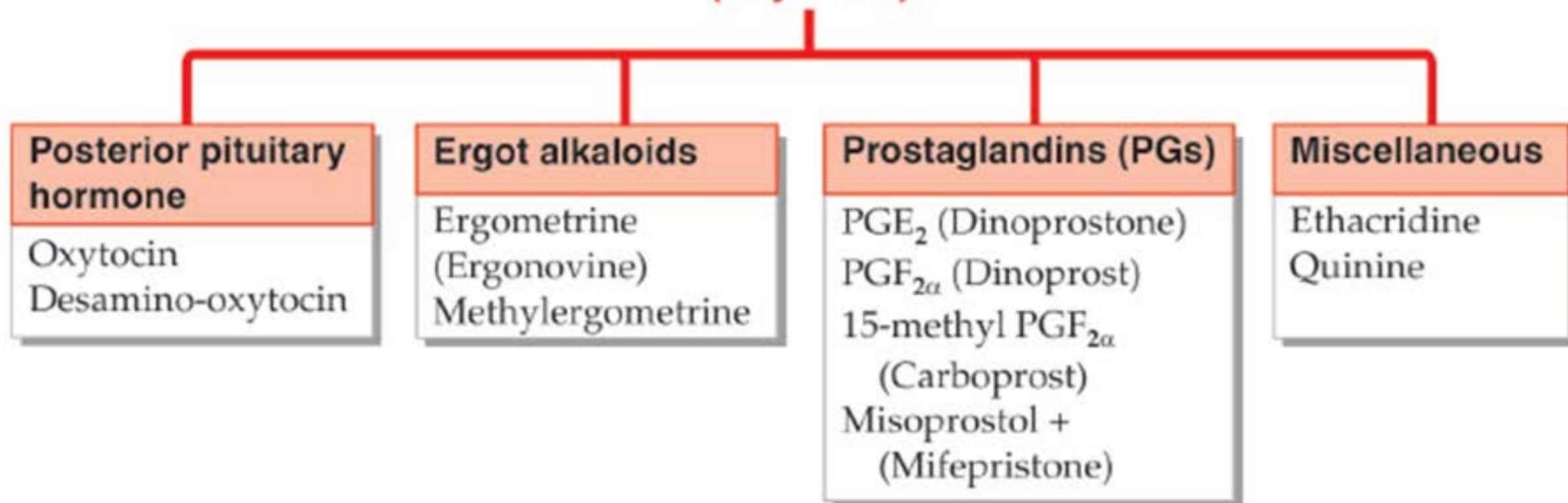
Injectable

- Depot medroxy-progesterone acetate (DMPA)
- Norethindrone enanthate

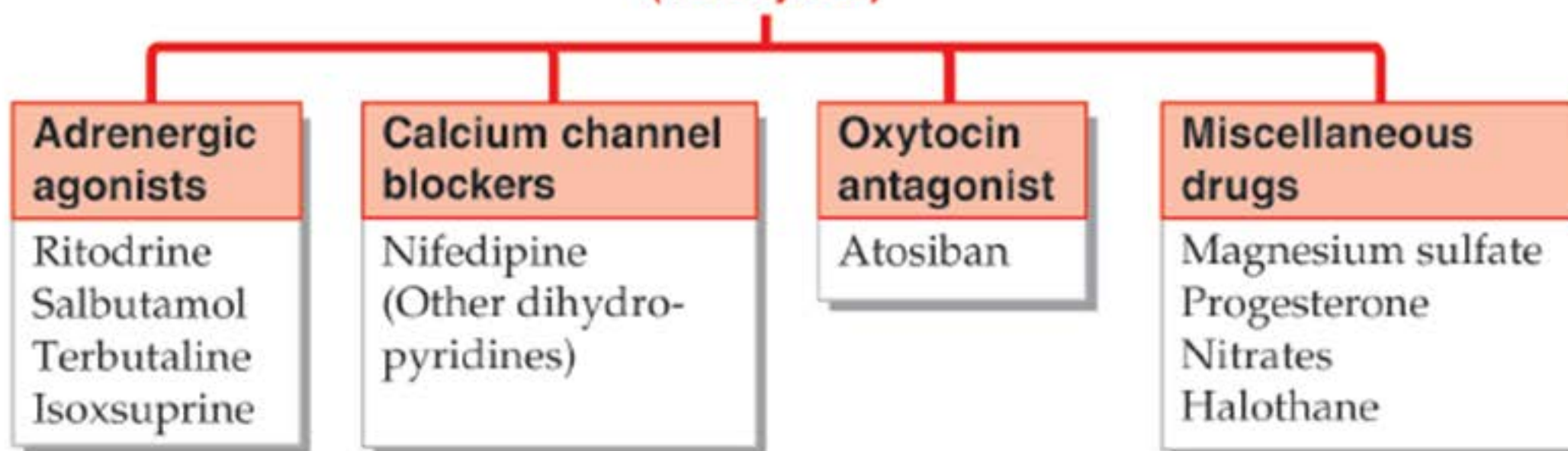
Progestin only pills (mini pills)

- Norethindrone (0.35 mg)
- Norgestrel (75 µg)

UTERINE STIMULANTS (Oxytocics)

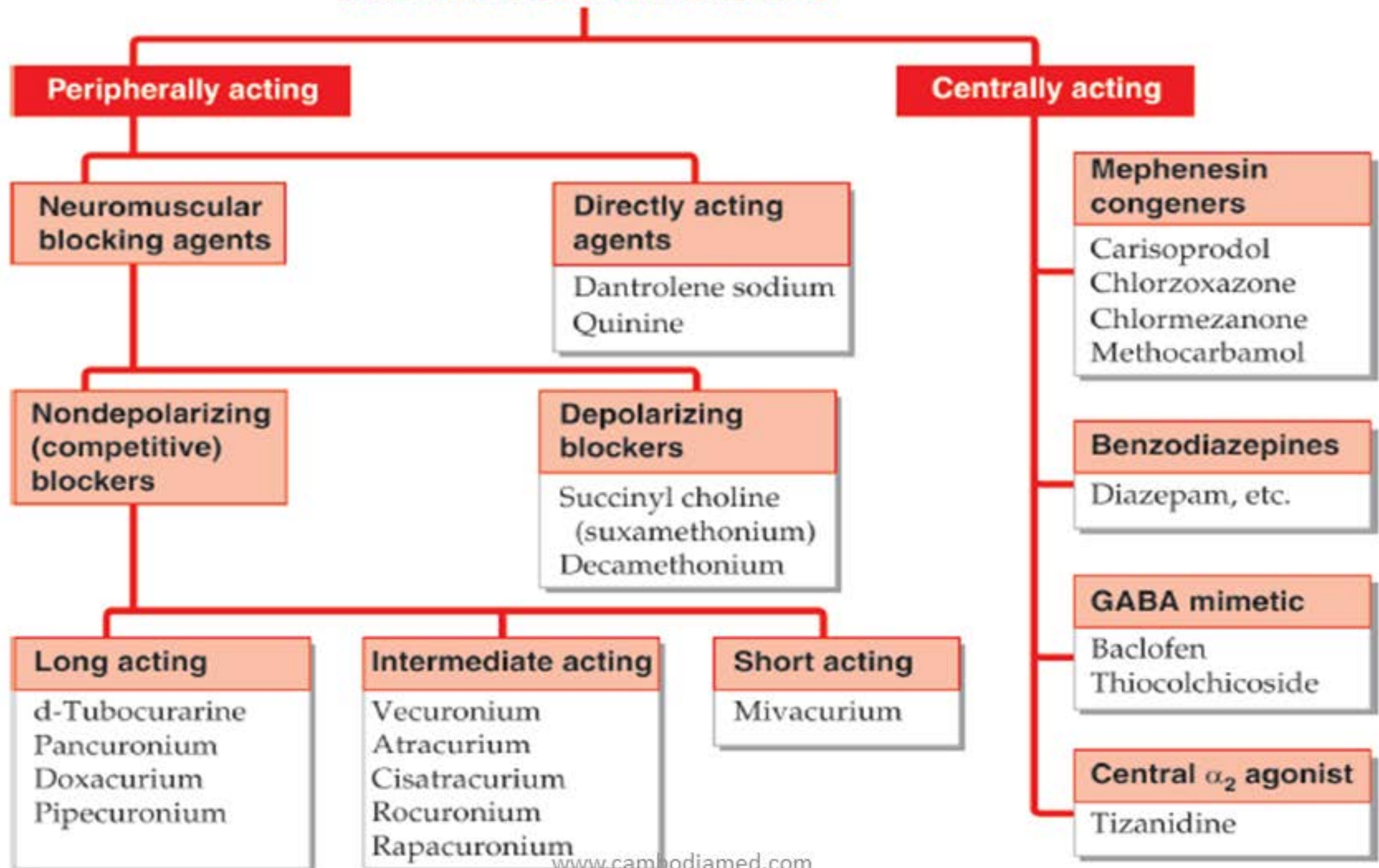


UTERINE RELAXANTS (Tocolytics)

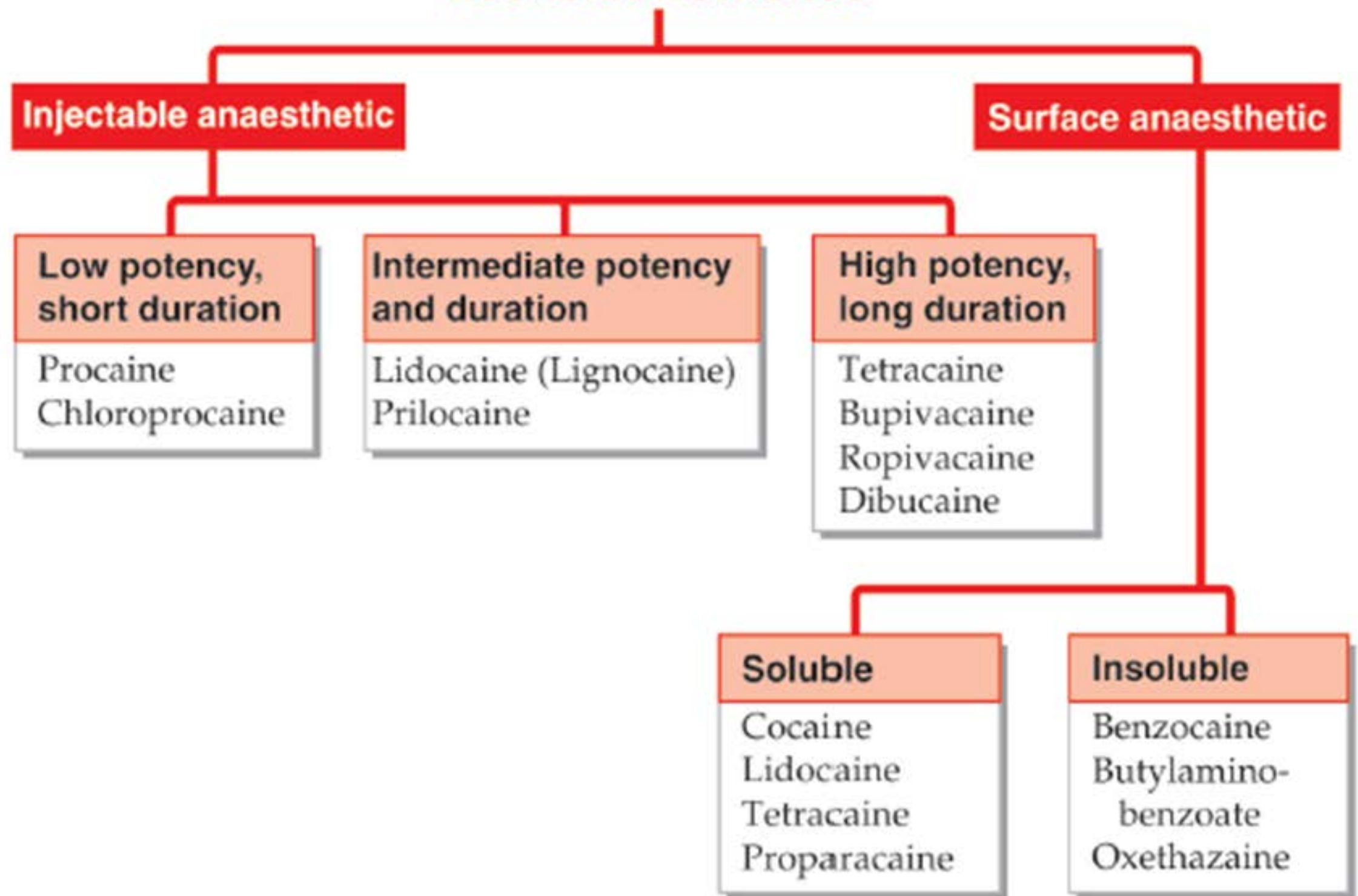


Drugs Acting on Peripheral (somatic) Nervous System

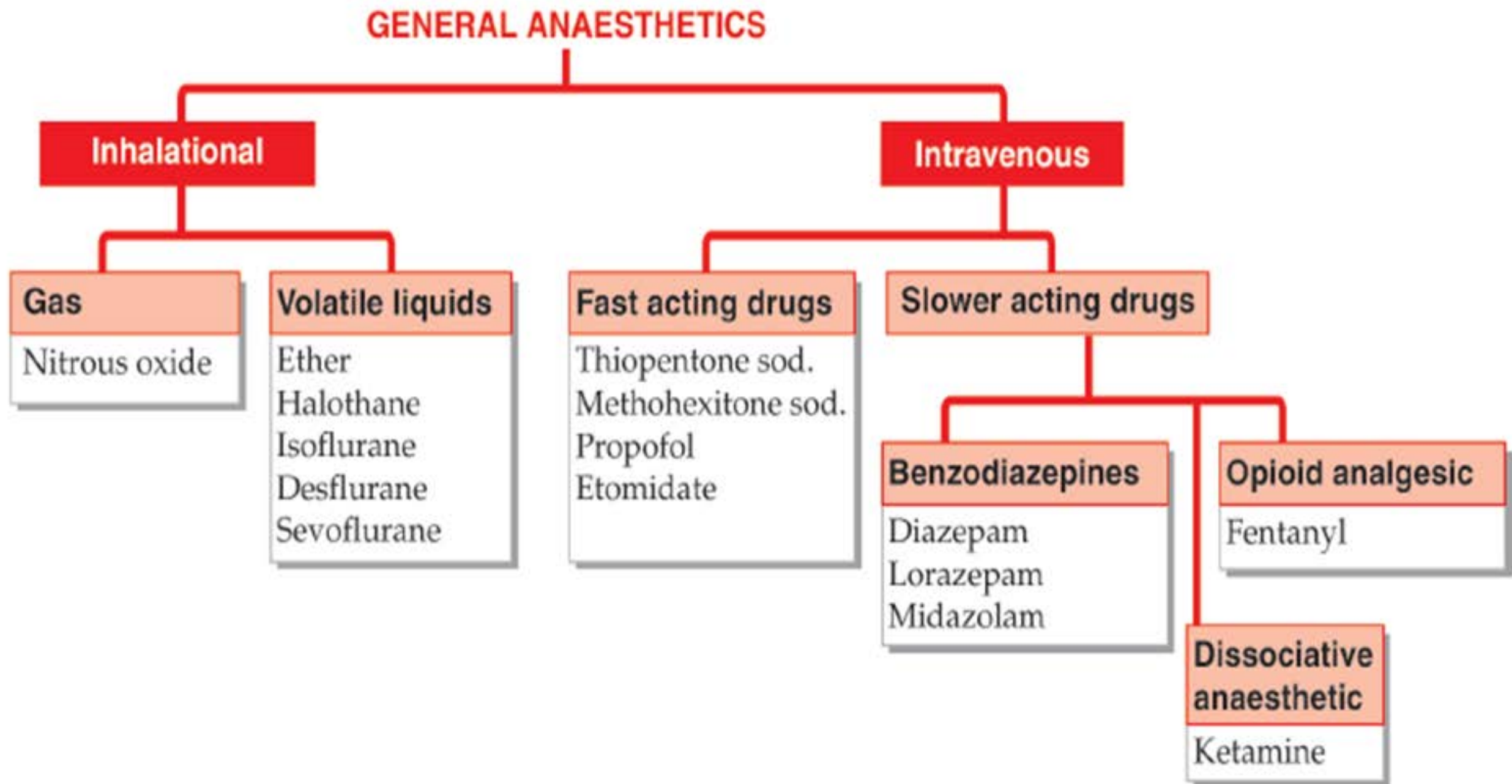
SKELETAL MUSCLE RELAXANTS



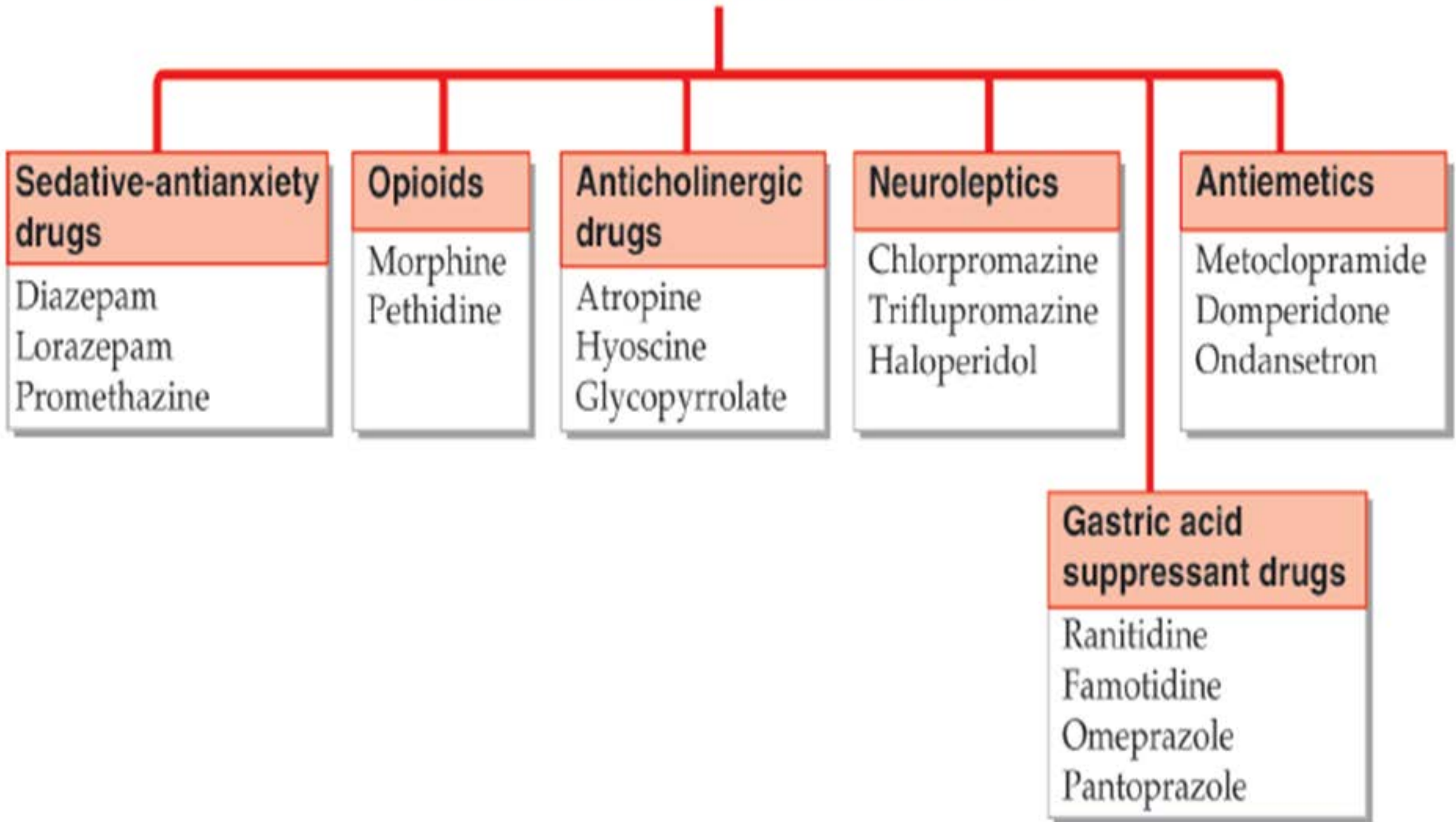
LOCAL ANAESTHETICS



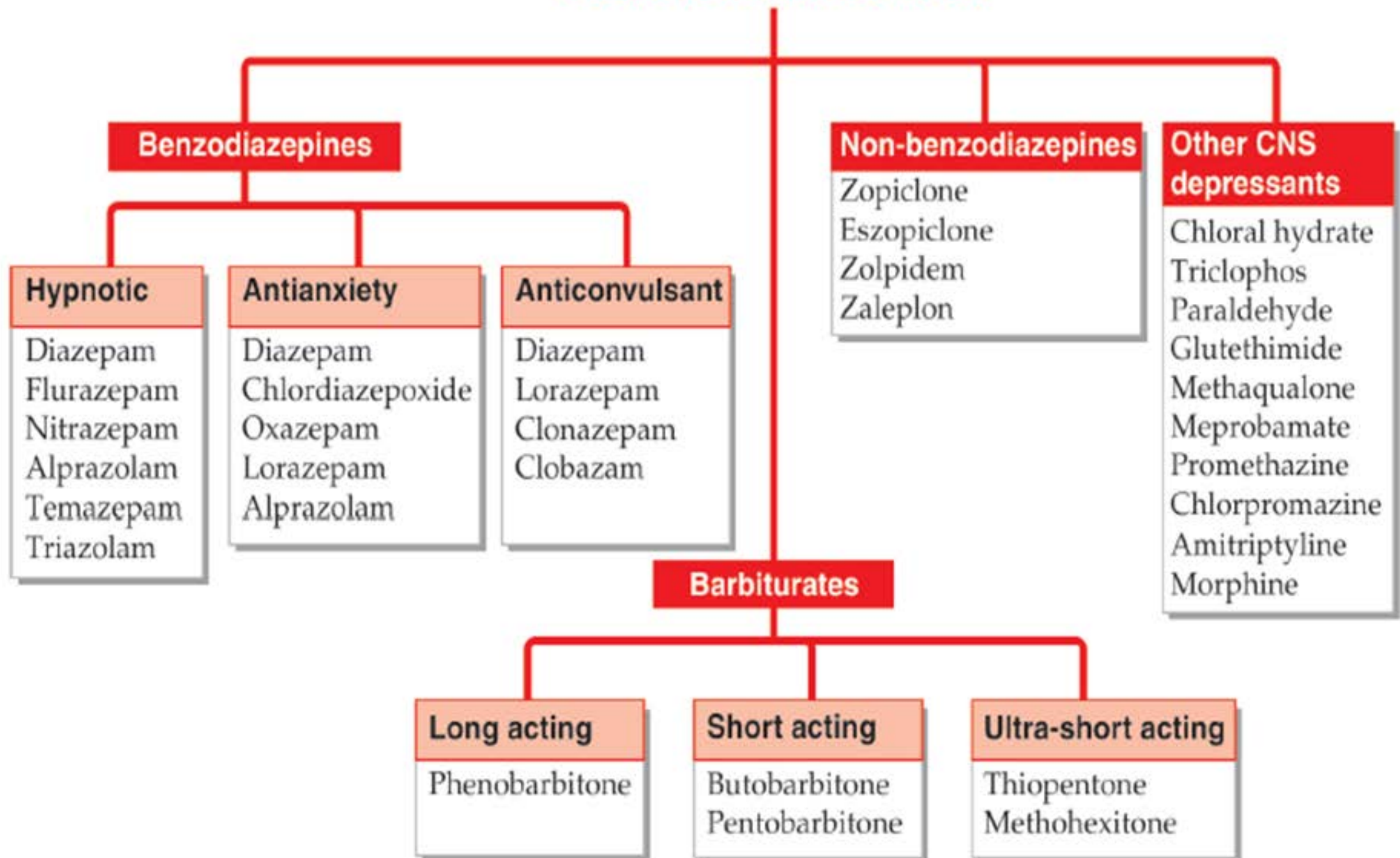
Drugs Acting on Central Nervous System



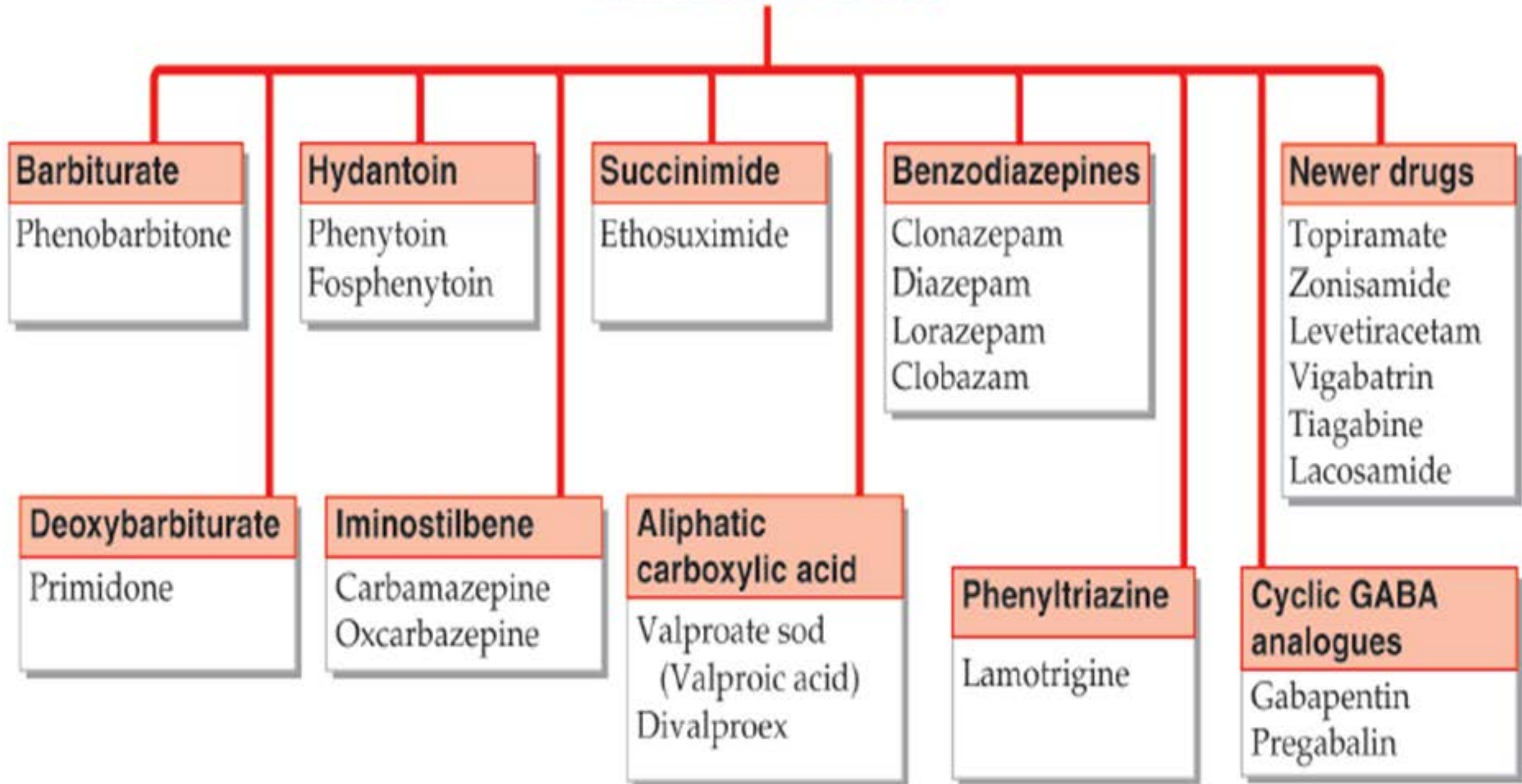
PREANAESTHETIC MEDICATION DRUGS



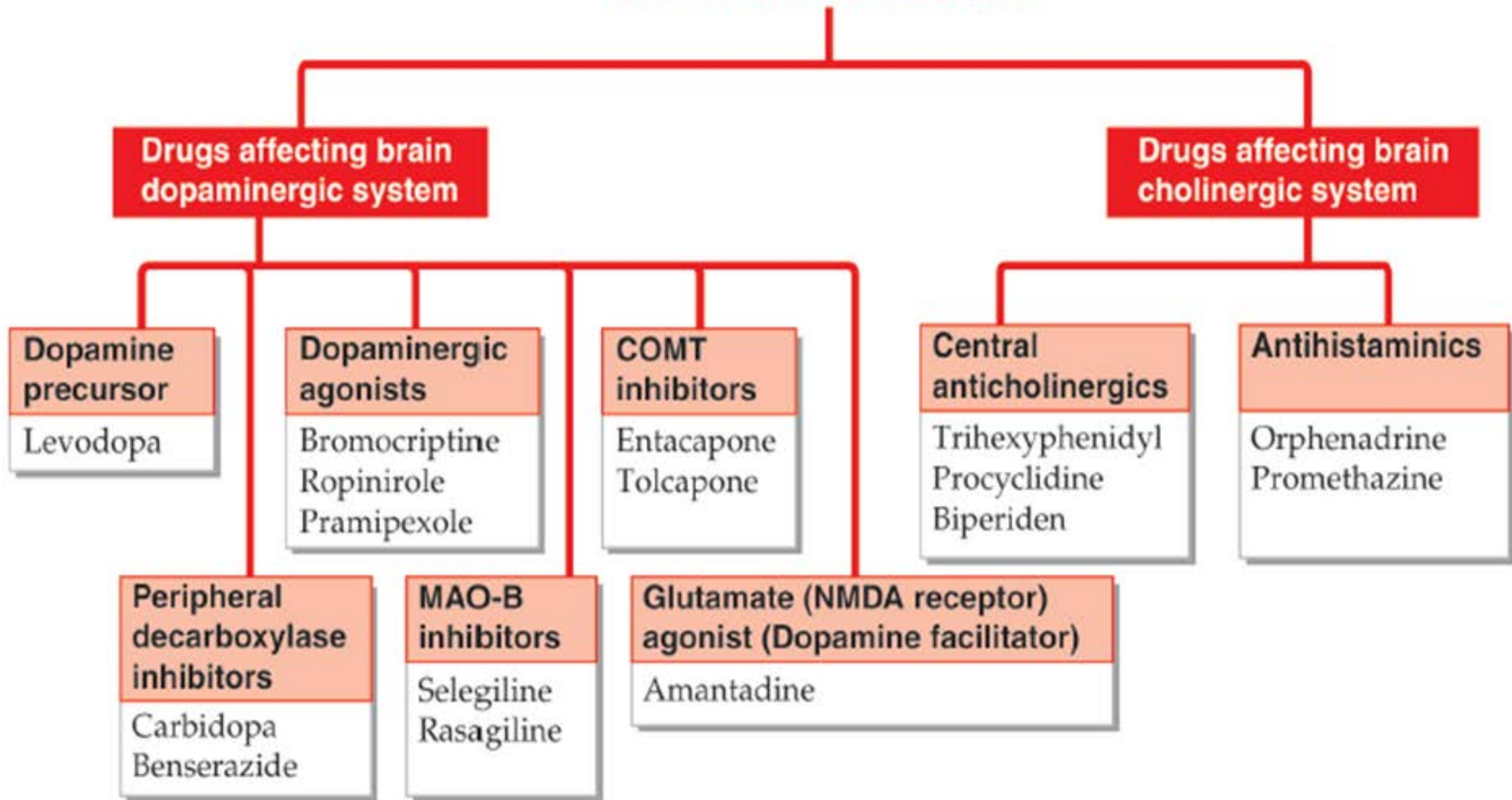
SEDATIVE-HYPNOTIC DRUGS



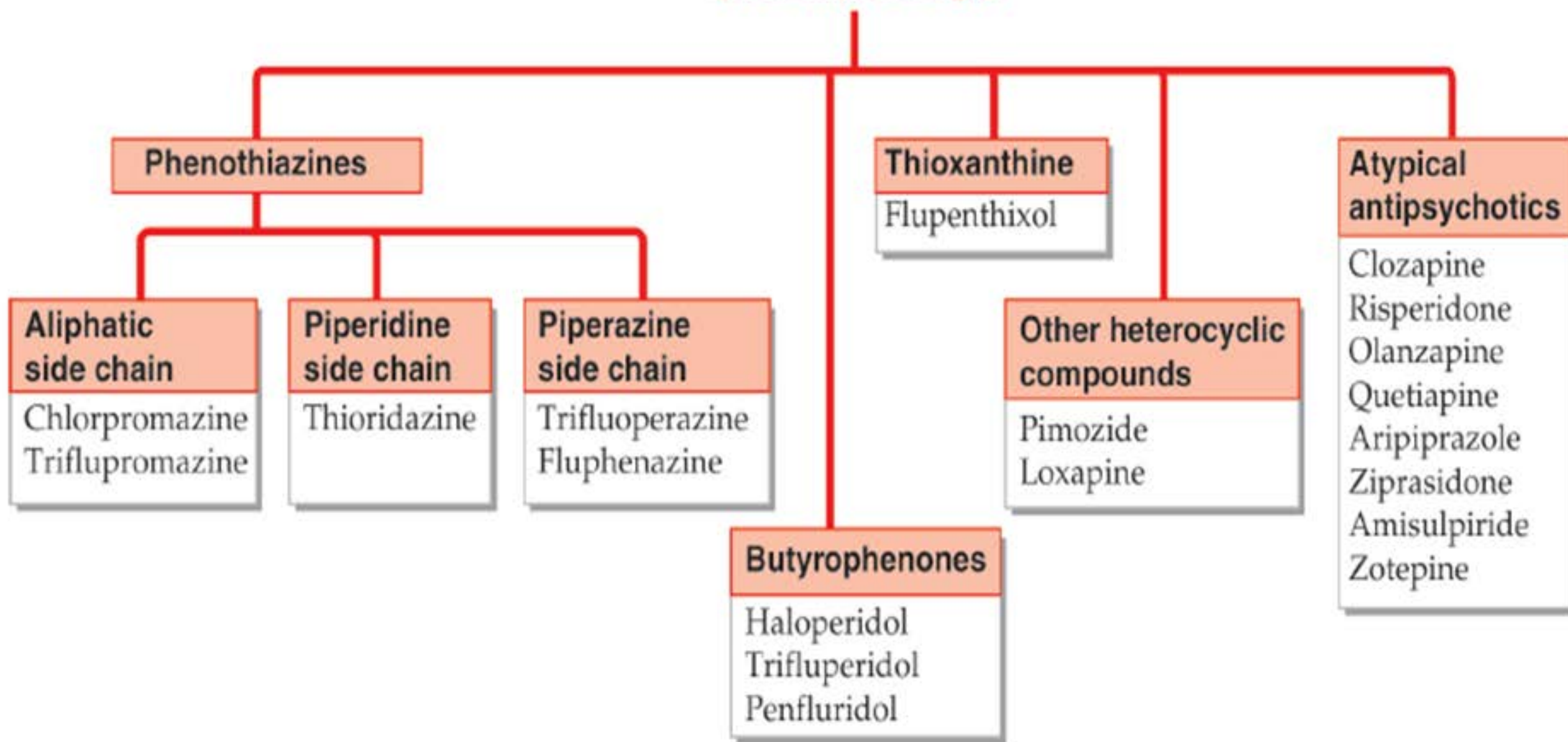
ANTIEPILEPTIC DRUGS



ANTIPARKINSONIAN DRUGS



ANTIPSYCHOTIC DRUGS (Neuroleptic drugs)

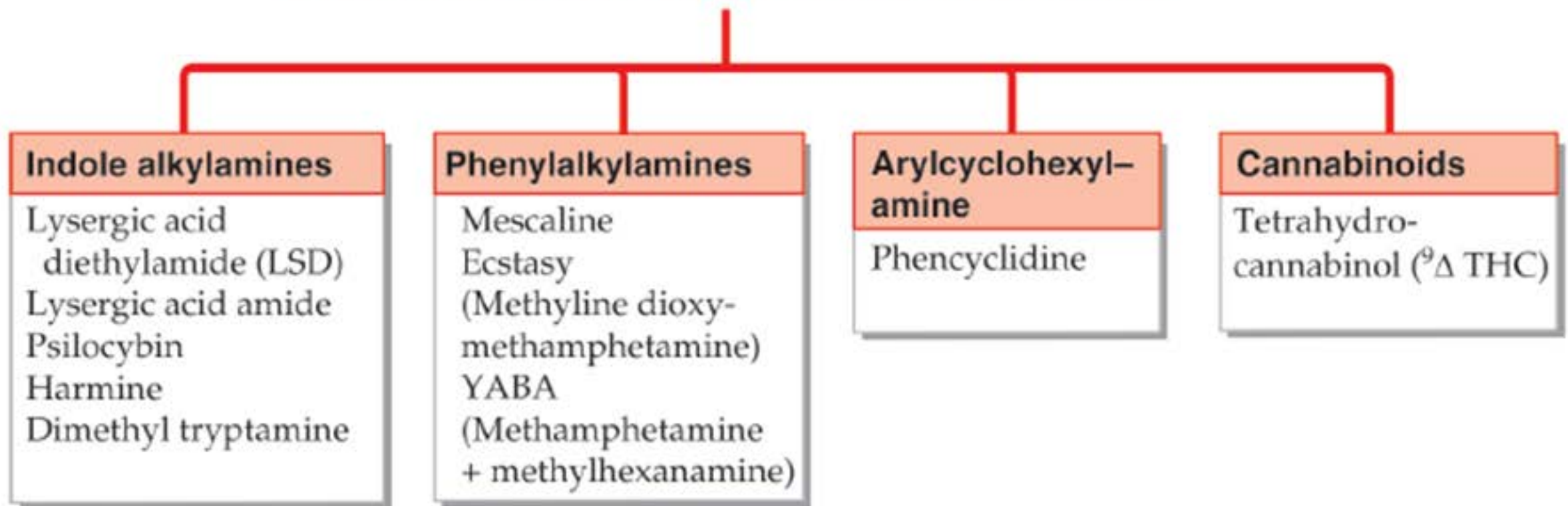


DRUGS FOR MANIA AND BIPOLAR DISORDER

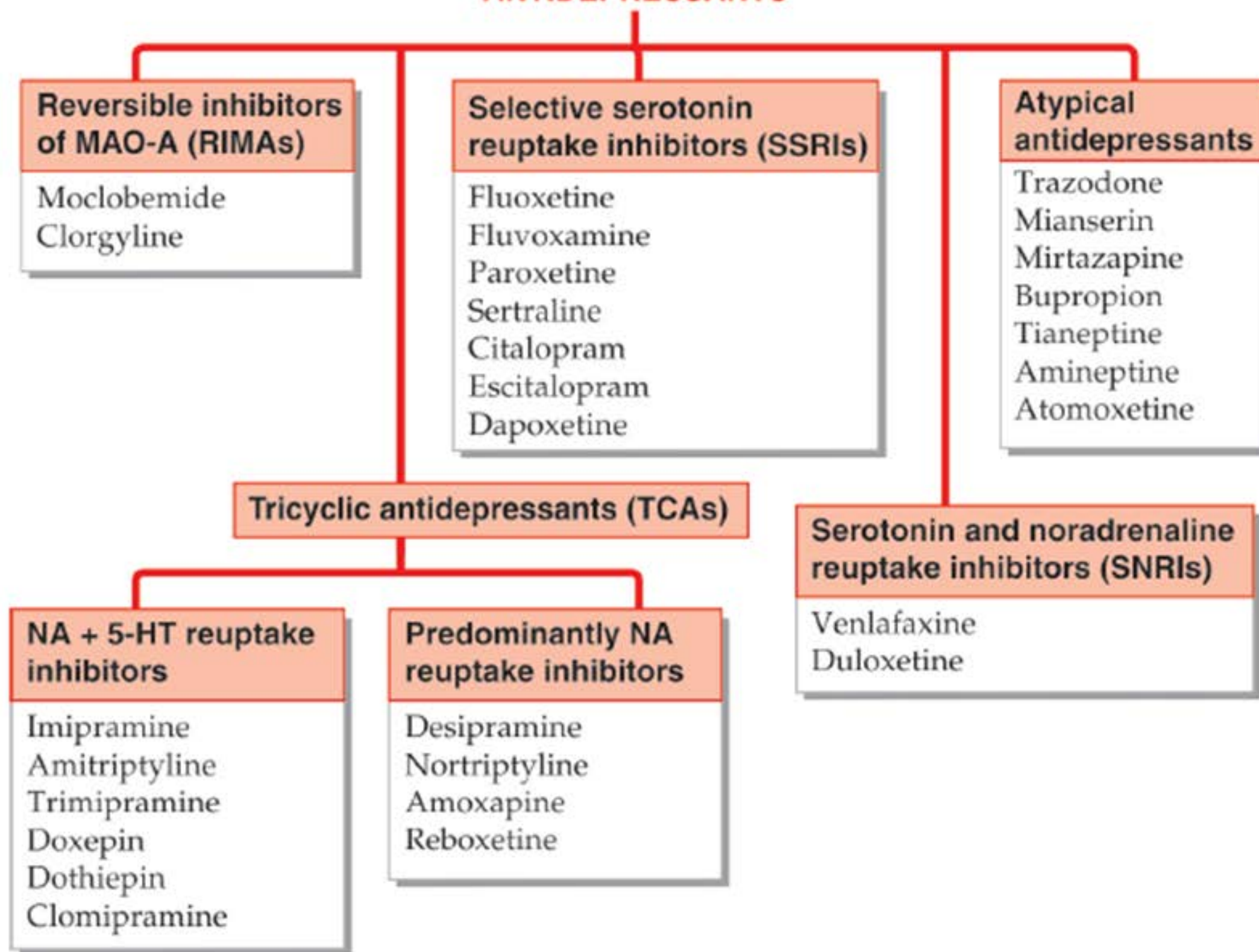


HALLUCINOGENS

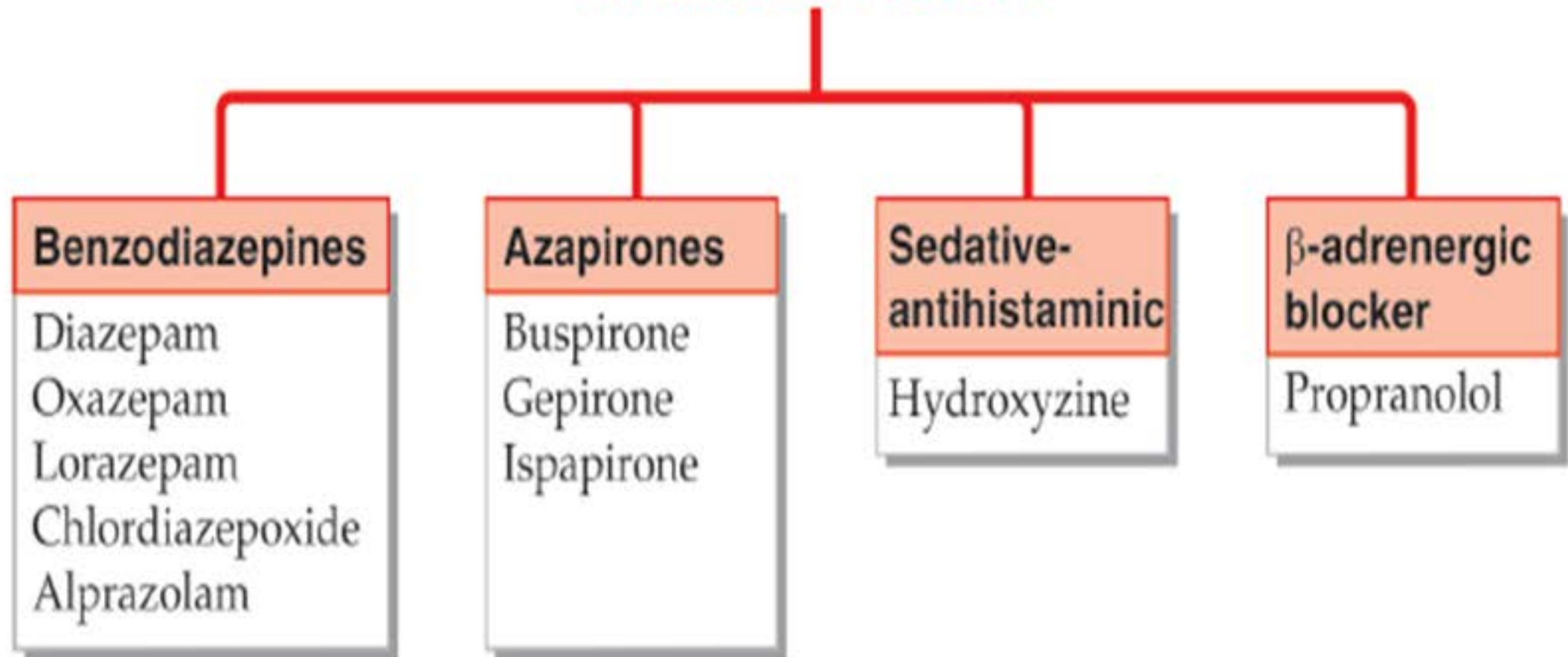
(Psychotomimetics, Psychedelics, Psychodysleptics)



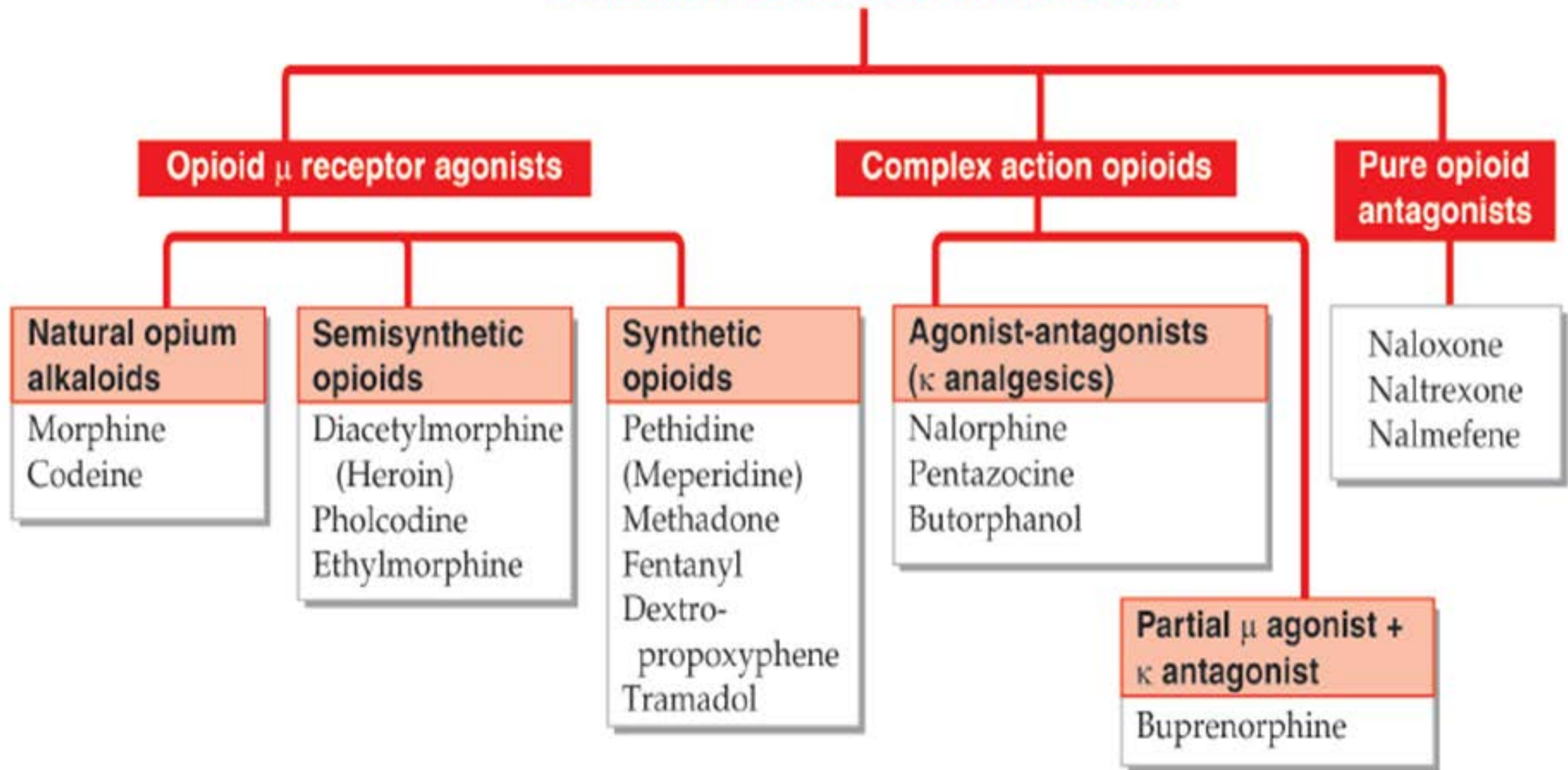
ANTIDEPRESSANTS



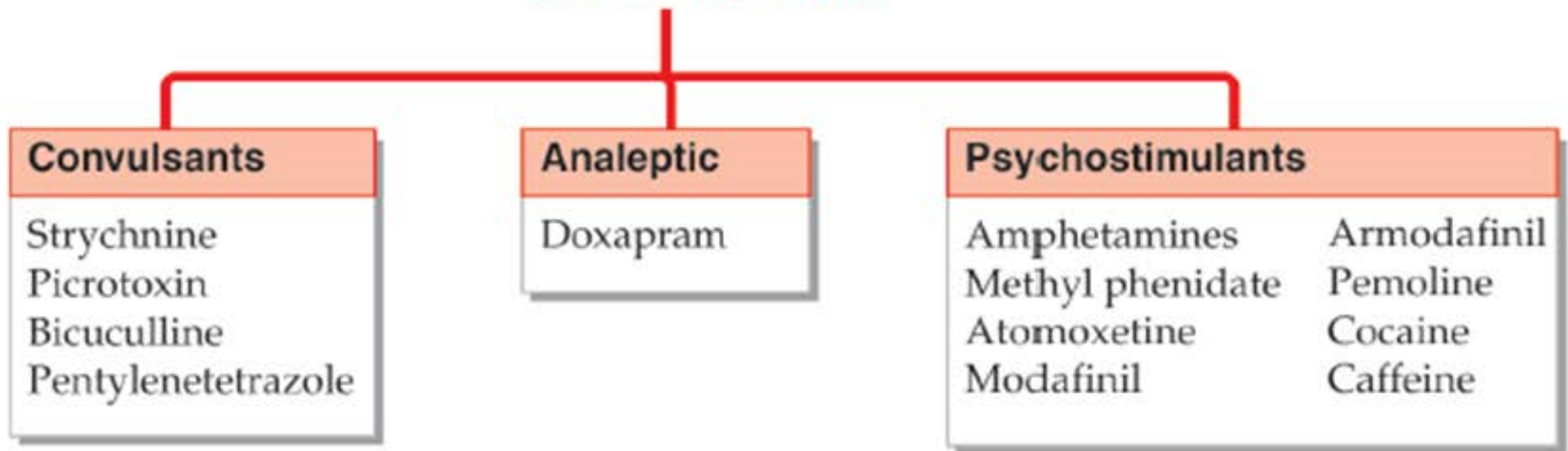
ANTI-ANXIETY DRUGS



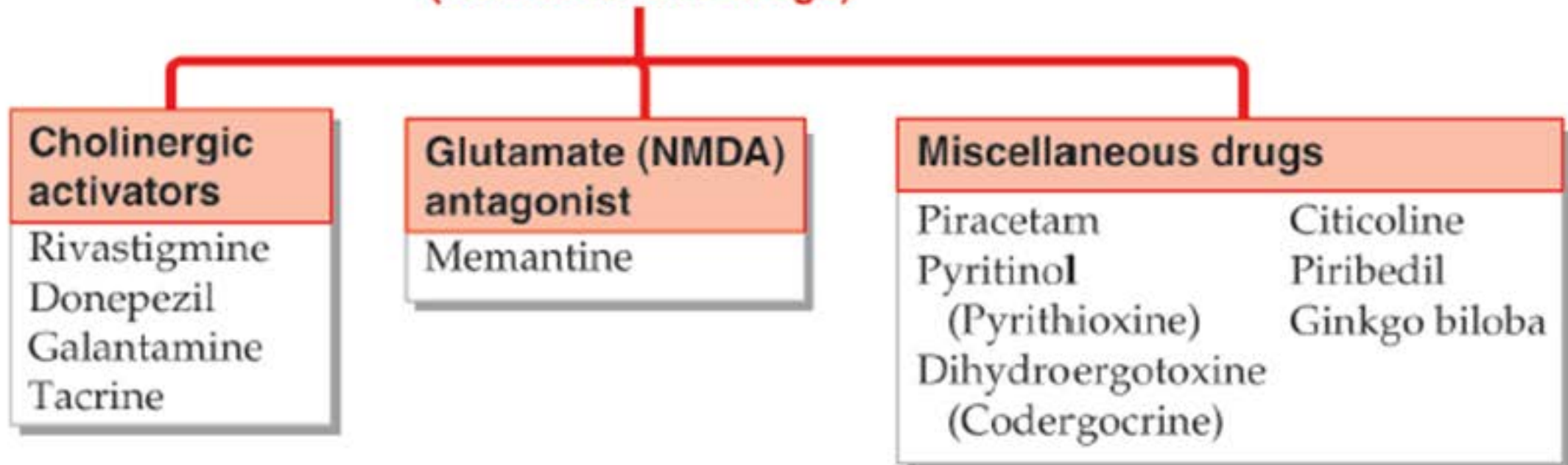
OPIOID ANALGESICS AND ANTAGONISTS



CNS STIMULANTS

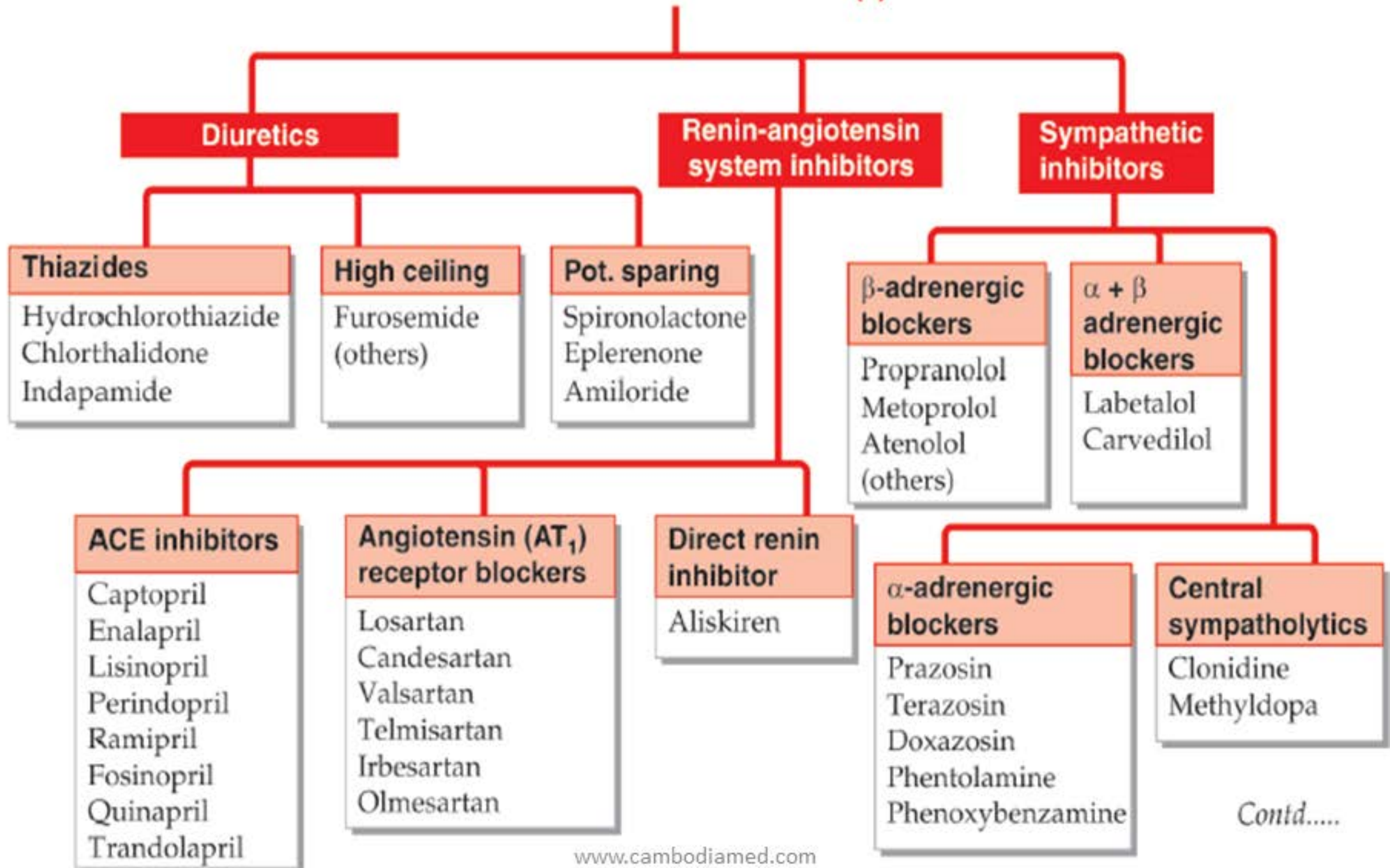


COGNITION ENHANCERS (Cerebroactive drugs)

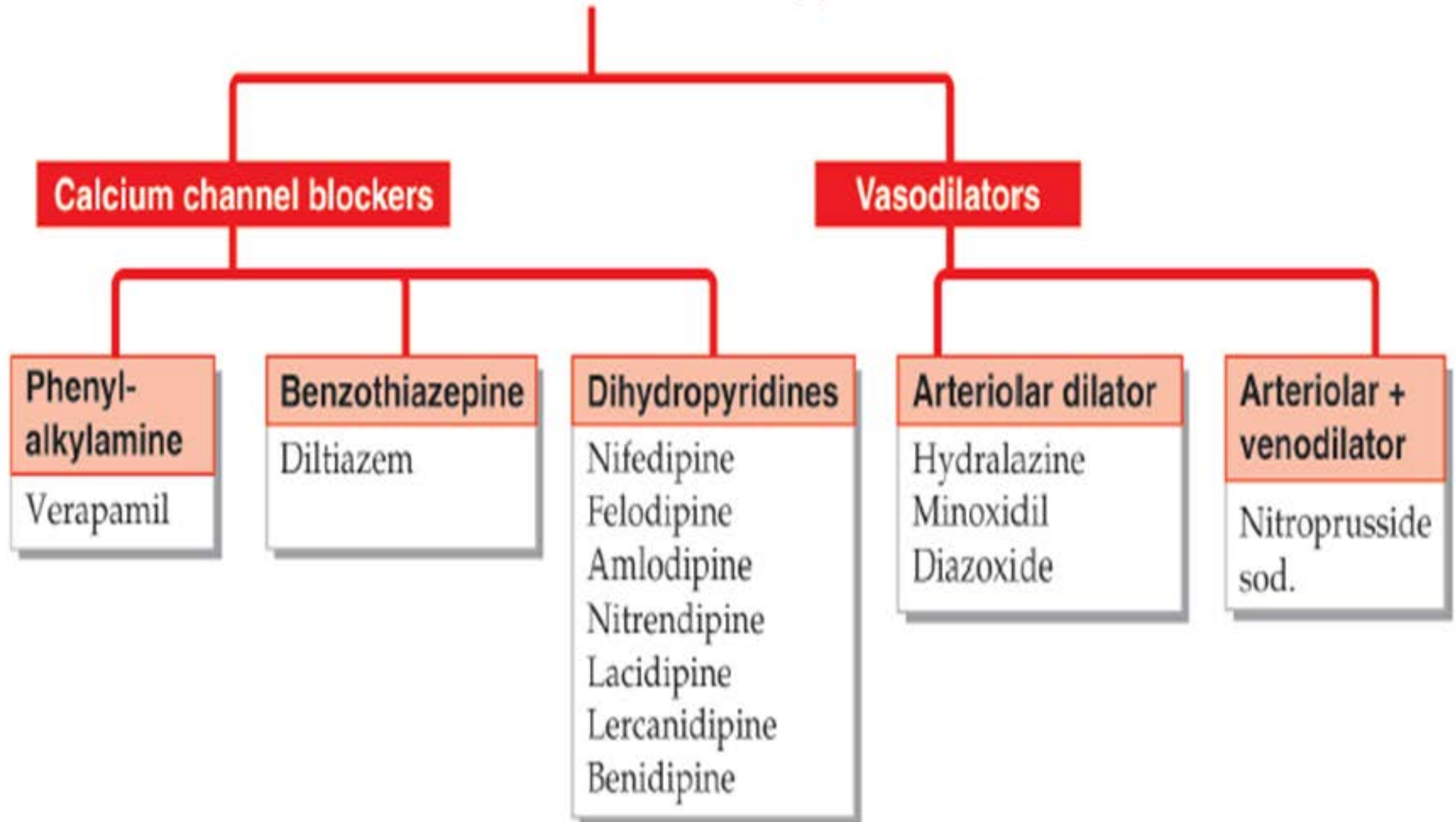


Cardiovascular Drugs

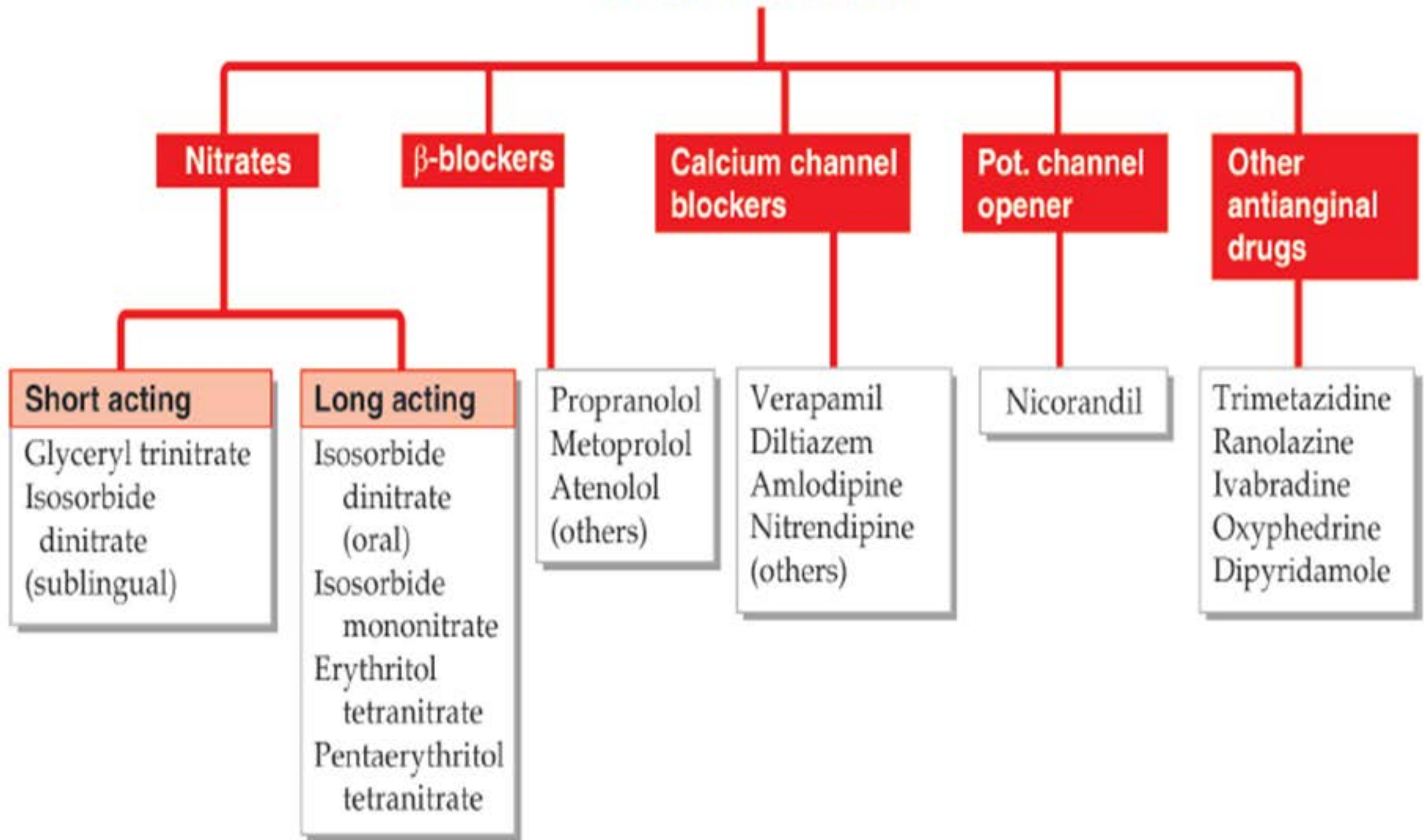
ANTIHYPERTENSIVE DRUGS (1)



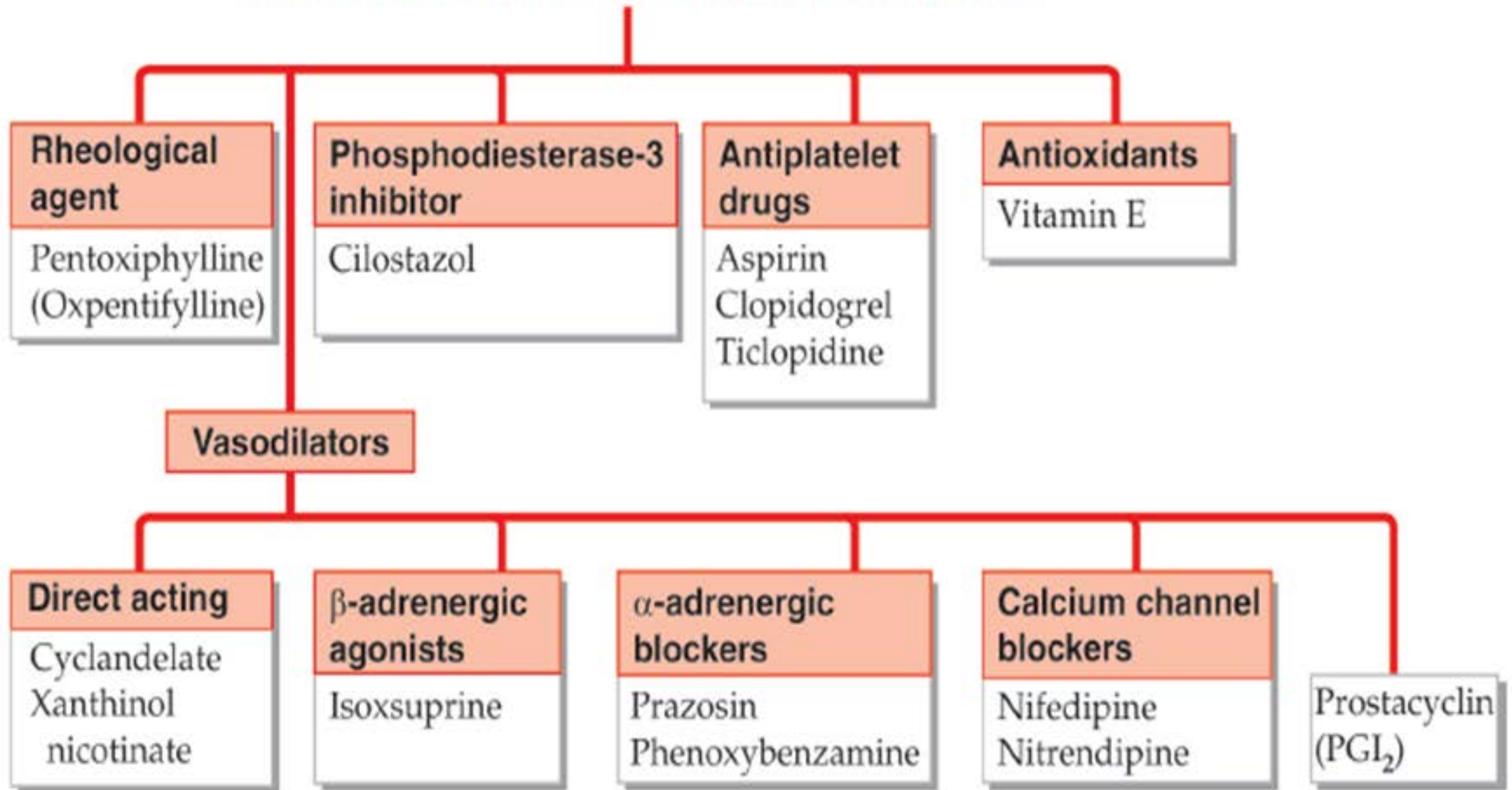
ANTIHYPERTENSIVE DRUGS (2)



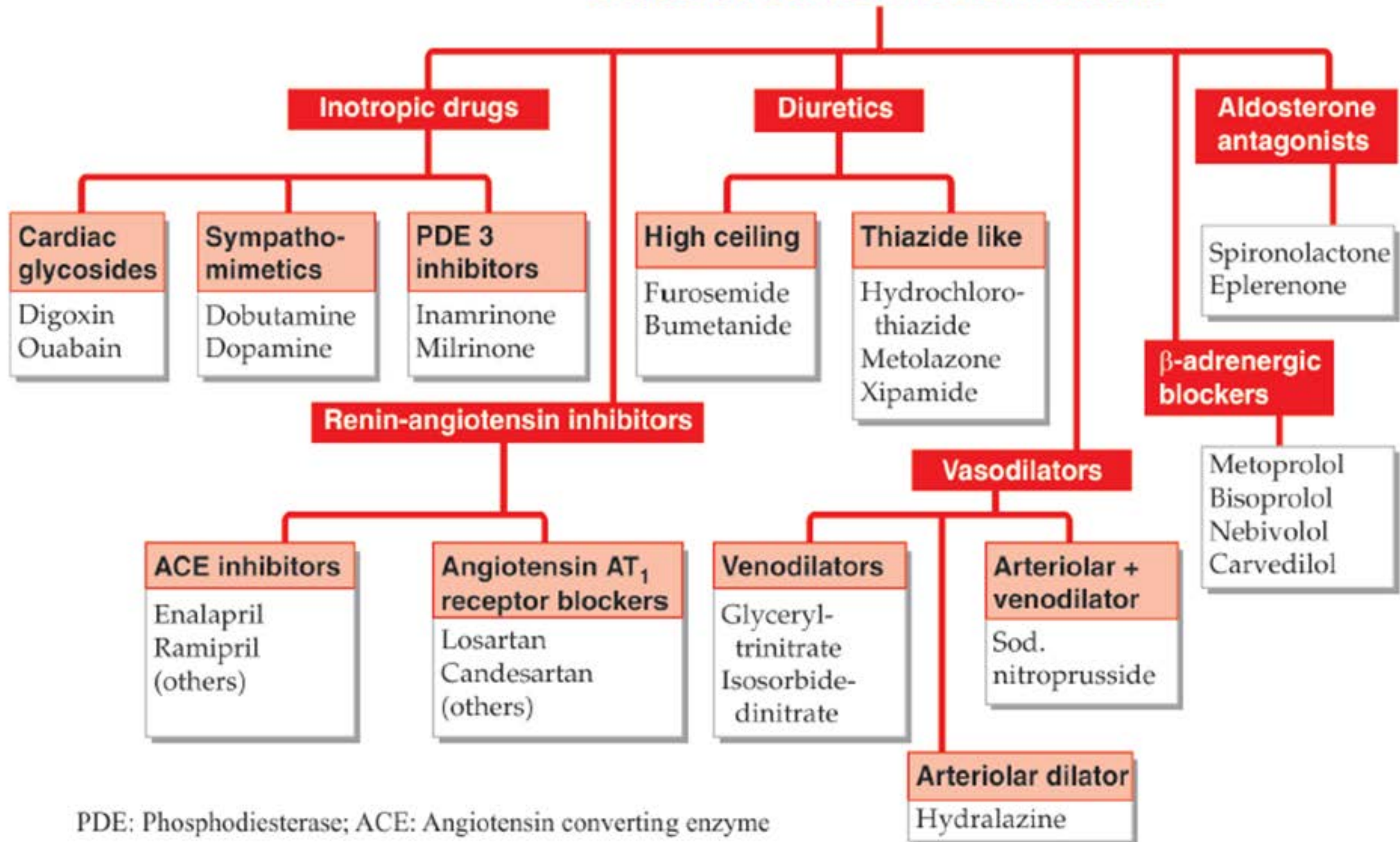
ANTIANGINAL DRUGS



DRUGS FOR PERIPHERAL VASCULAR DISEASES

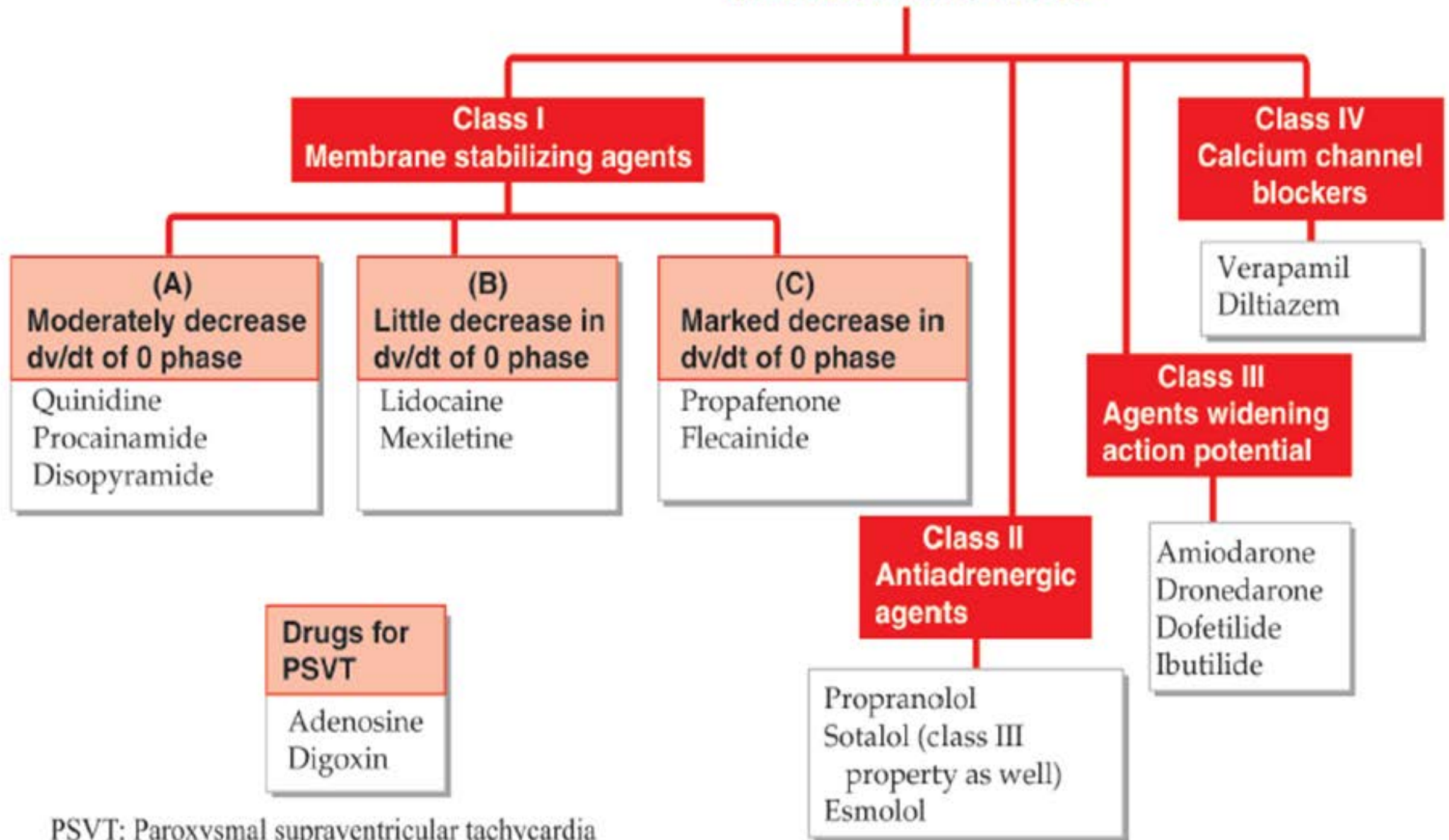


DRUGS FOR CONGESTIVE HEART FAILURE



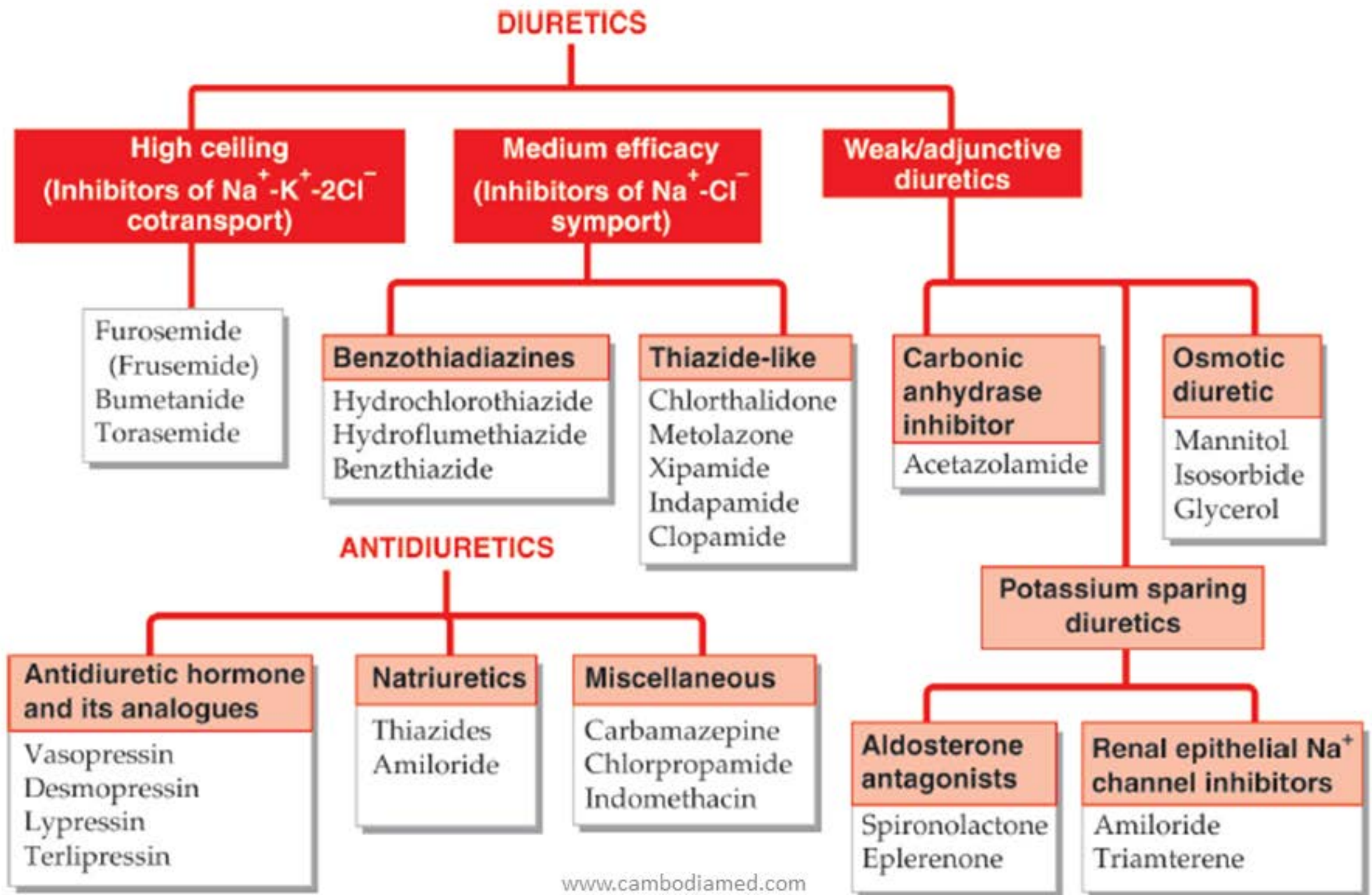
PDE: Phosphodiesterase; ACE: Angiotensin converting enzyme

ANTIARRHYTHMIC DRUGS

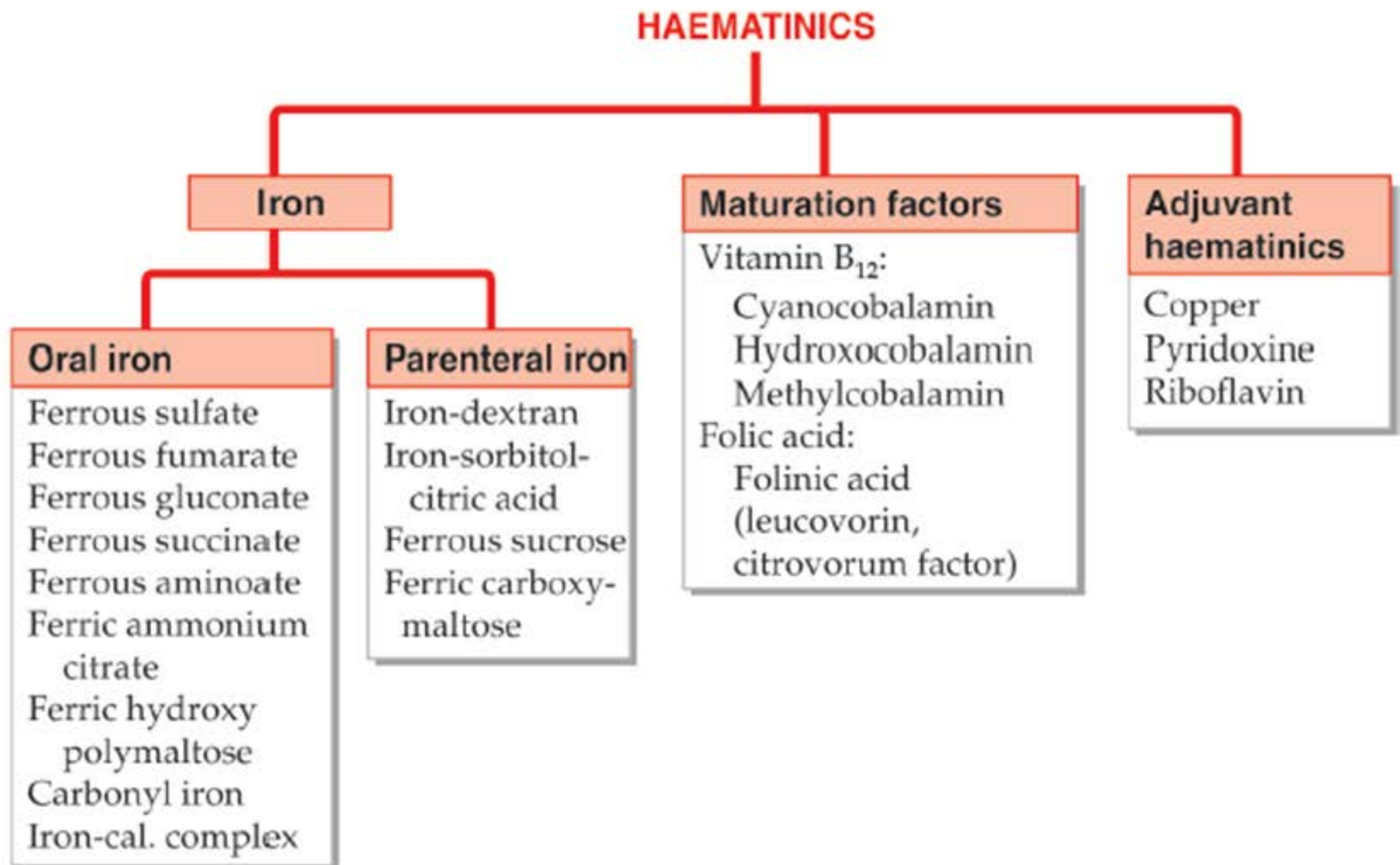


PSVT: Paroxysmal supraventricular tachycardia

Drugs Acting on Kidney



Drugs Affecting Blood



COAGULANTS

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graph TD; COAGULANTS --> Vitamin_K[Vitamin K]; COAGULANTS --> Miscellaneous[Miscellaneous];
```

Vitamin K

K₁: Phytonadione
(Phylloquinone)

K₃: Menadione
Acetomenaphthone
Menadione sod.
bisulfite
Menadione sod.
diphosphate

Miscellaneous

Fibrinogen (human)
Antihaemophilic factor
Desmopressin
Adrenochrome mono-
semicarbazone
Ethamsylate
Rutin

ANTICOAGULANTS

Parenteral anticoagulants

Indirect thrombin inhibitors

Heparin (unfractionated)
Low molecular weight heparins
(Enoxaparin, Reviparin, Nadroparin, Dalteparin, Parnaparin, Ardeparin)
Fondaparinux
Danaparoid

Direct thrombin inhibitors

Lepirudin
Bivalirudin
Argatroban

Oral anticoagulants

Coumarin derivatives

Bishydroxycoumarin (dicumarol)
Warfarin sod.
Acenocoumarol (Nicoumalone)
Ethyl-biscoum-acetate

Direct factor Xa inhibitor

Rivaroxaban

Oral direct thrombin inhibitor

Dabigatran-etexilate

In vitro anticoagulants

Heparin
Sod. edetate
Sod. citrate
Sod. oxalate

Fibrinolytics (Thrombolytics)

Streptokinase
Urokinase
Alteplase (rt-PA)
Reteplase
Tenecteplase

Antifibrinolytics (Antithrombolytics)

Epsilon amino-caproic acid
(EA CA)
Tranexamic acid

ANTIPLATELET DRUGS (Antithrombotic drugs)

Thromboxane synthesis inhibitor

Aspirin

Platelet cAMP enhancer

Dipyridamole

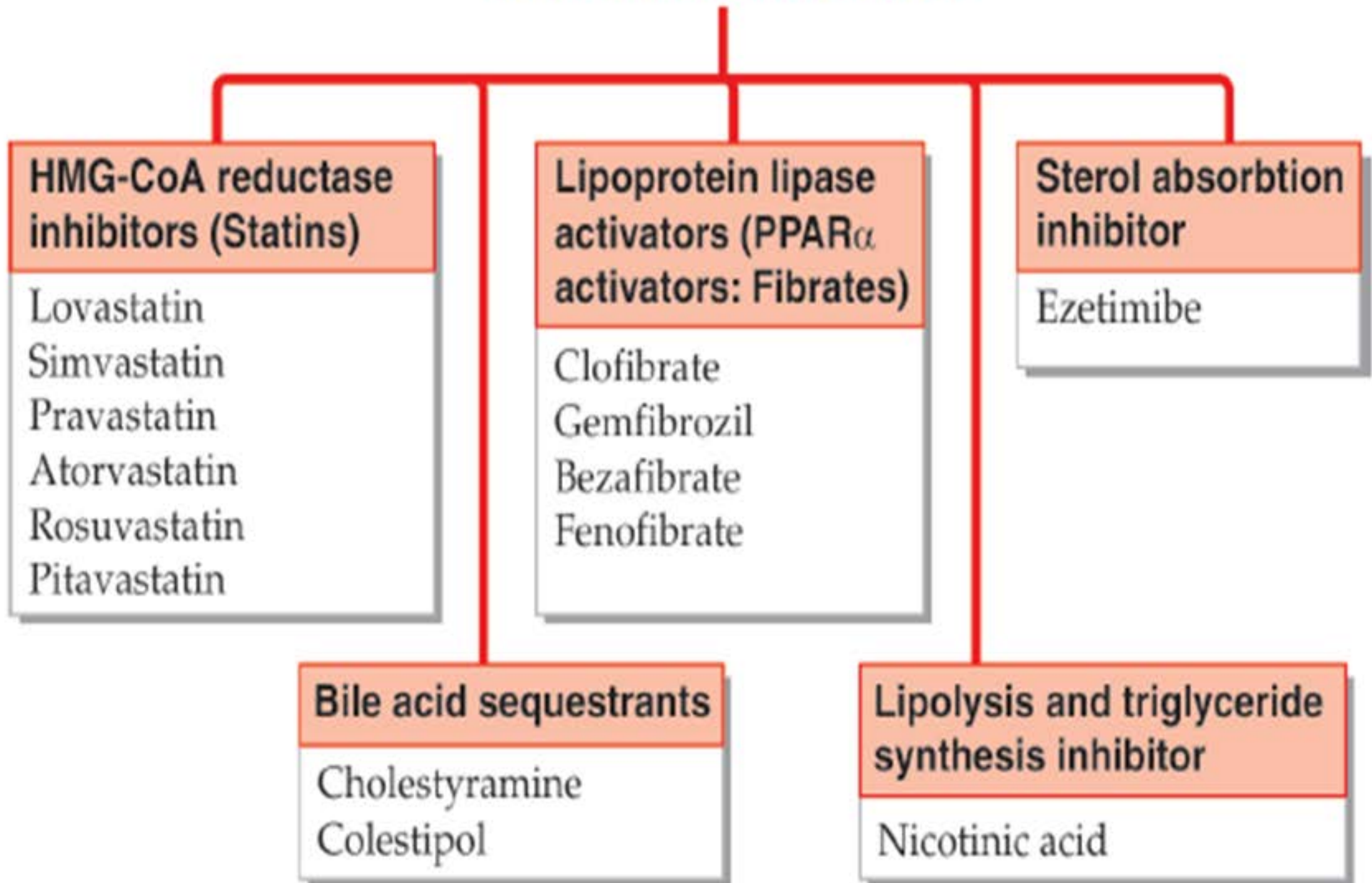
P2Y₁₂ receptor blockers

Ticlopidine
Clopidogrel
Prasugrel

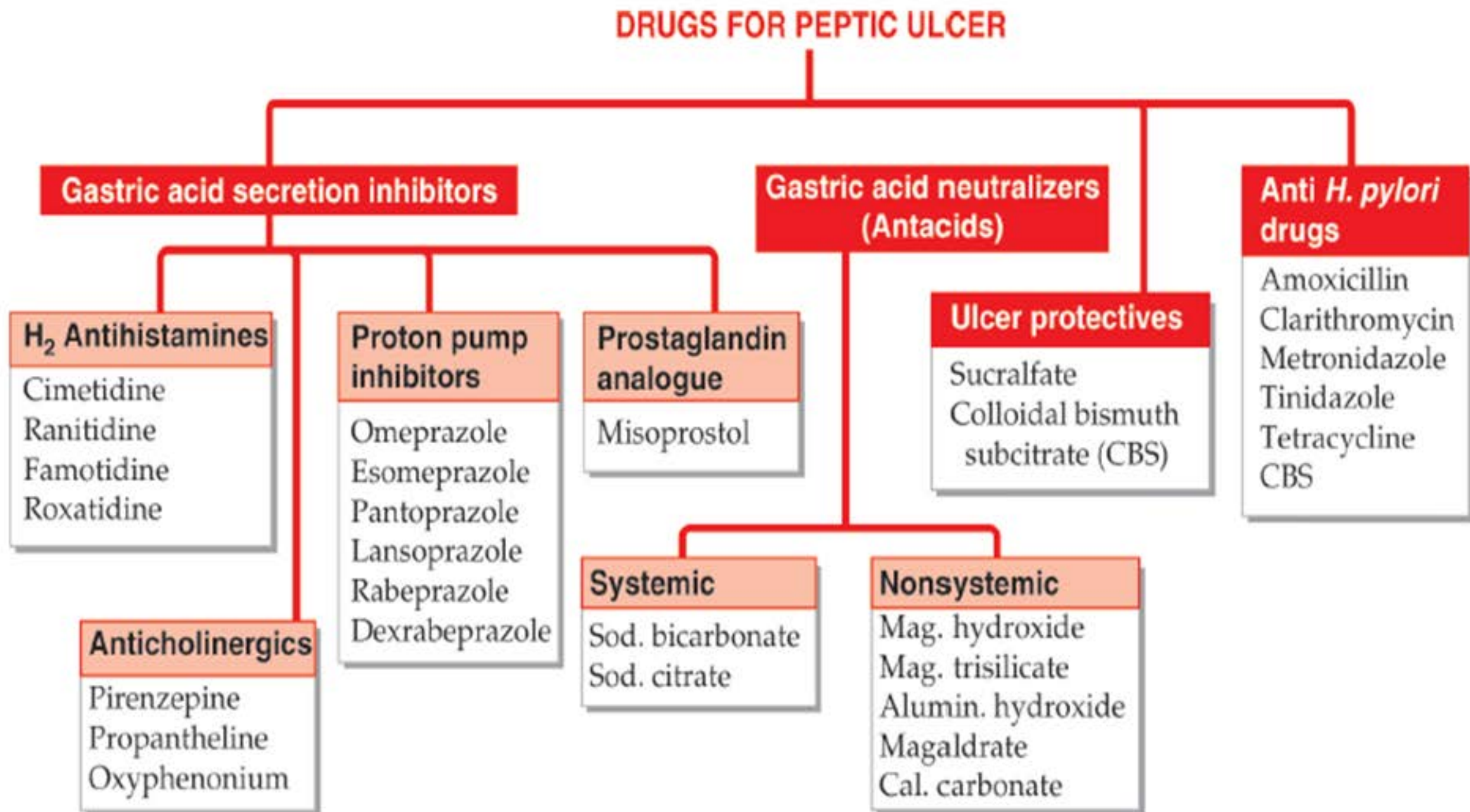
GP II_b/III_a antagonists

Abciximab
Eptifibatide
Tirofiban

HYPOLIPIDAEMIC DRUGS



Gastrointestinal Drugs



ANTIEMETICS

Anticholinergics

Hyoscine
Dicyclomine

Neuroleptics (D2 blockers)

Chlorpromazine
Triflupromazine
Prochlorperazine
(others)

Prokinetic drugs

Metoclopramide
Domperidone
Cisapride,
Mosapride
Itopride

NK₁ receptor antagonists

Aprepitant
Fosaprepitant

H₁ antihistaminics

Promethazine
Diphenhydramine
Dimenhydrinate
Doxylamine
Meclozine (Meclizine)

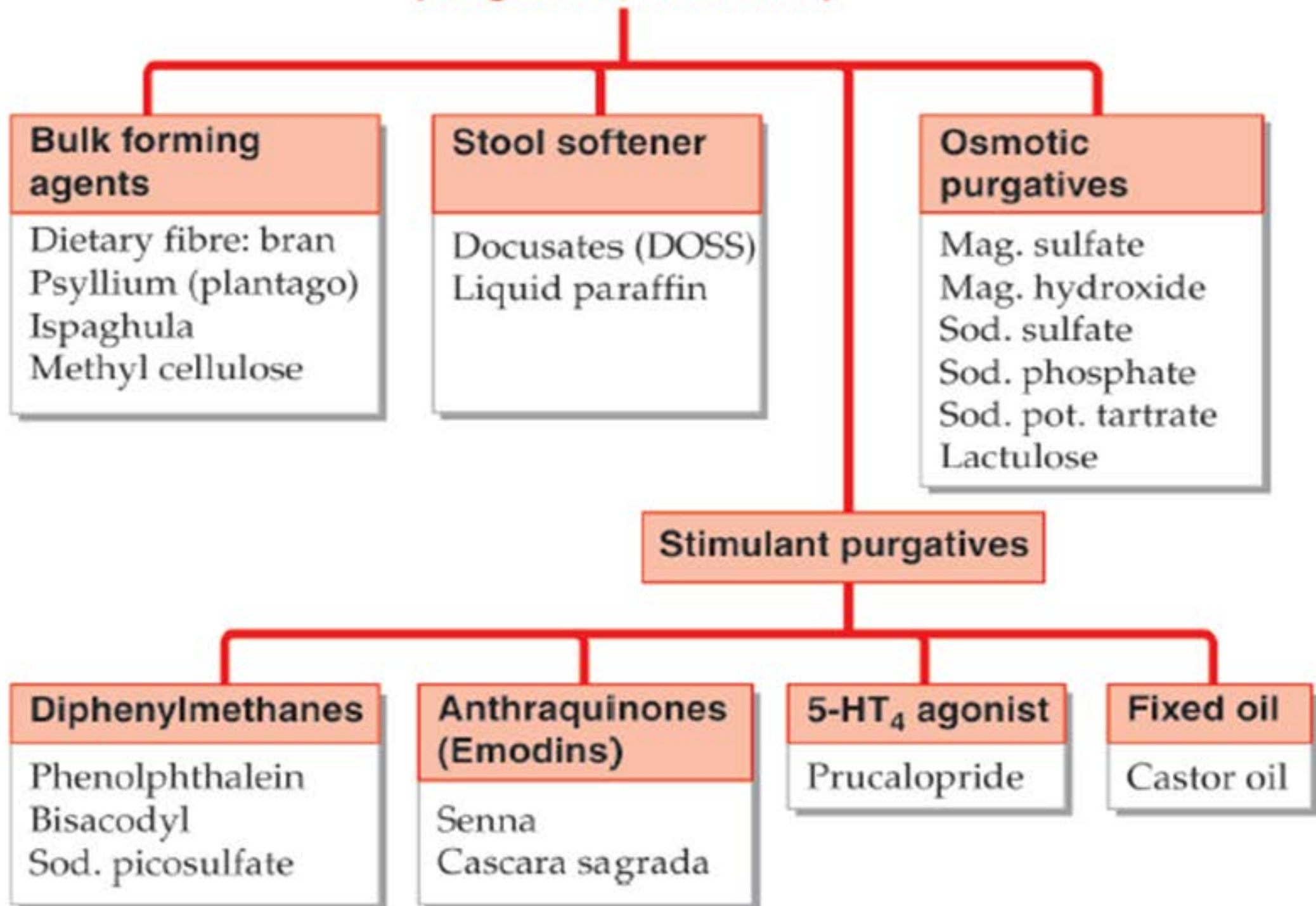
5-HT₃ antagonists

Ondansetron
Granisetron
Palonosetron
Ramosetron

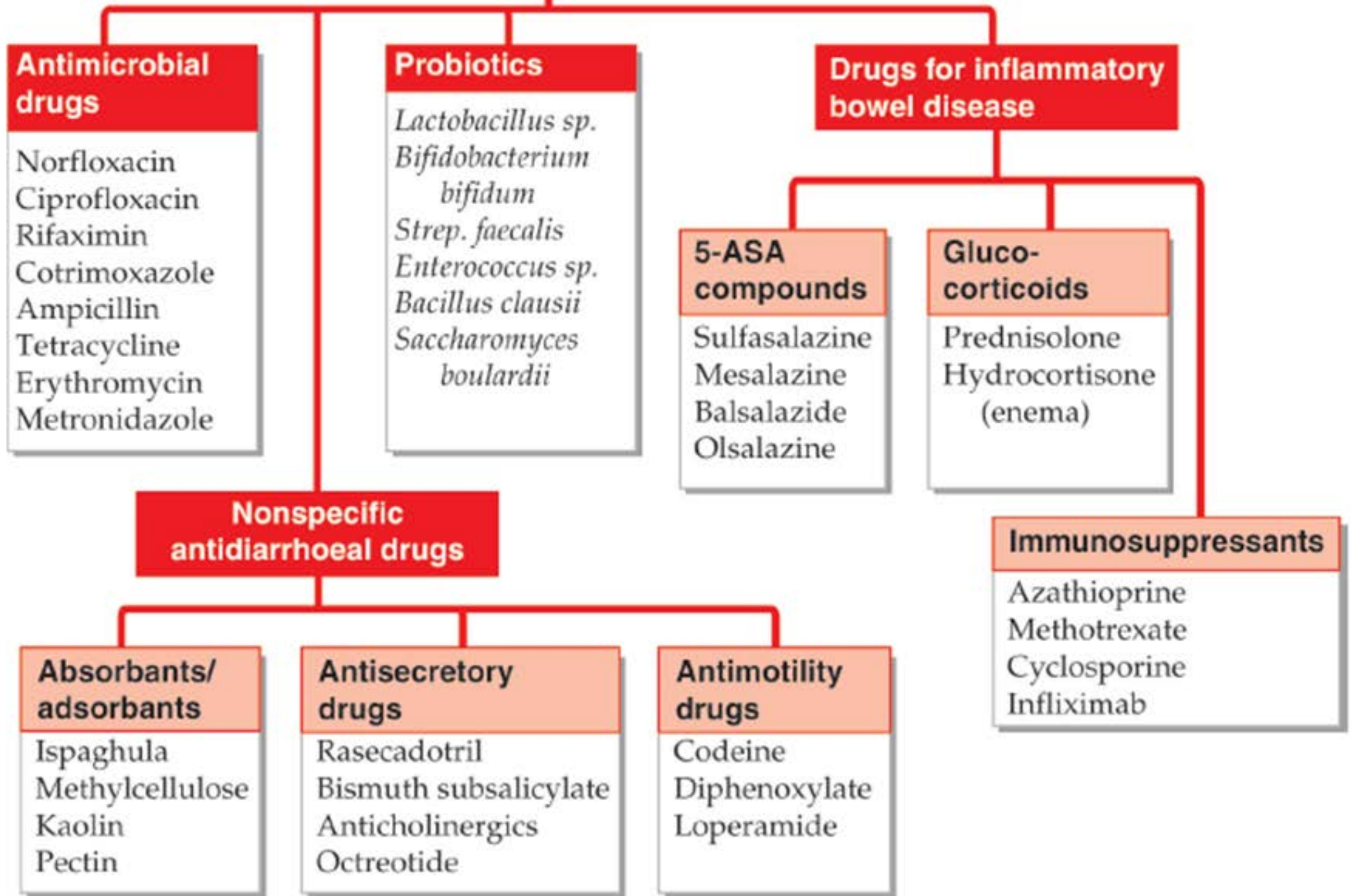
Adjuvant antiemetics

Dexamethasone
Benzodiazepines
Dronabinol
Nabilone

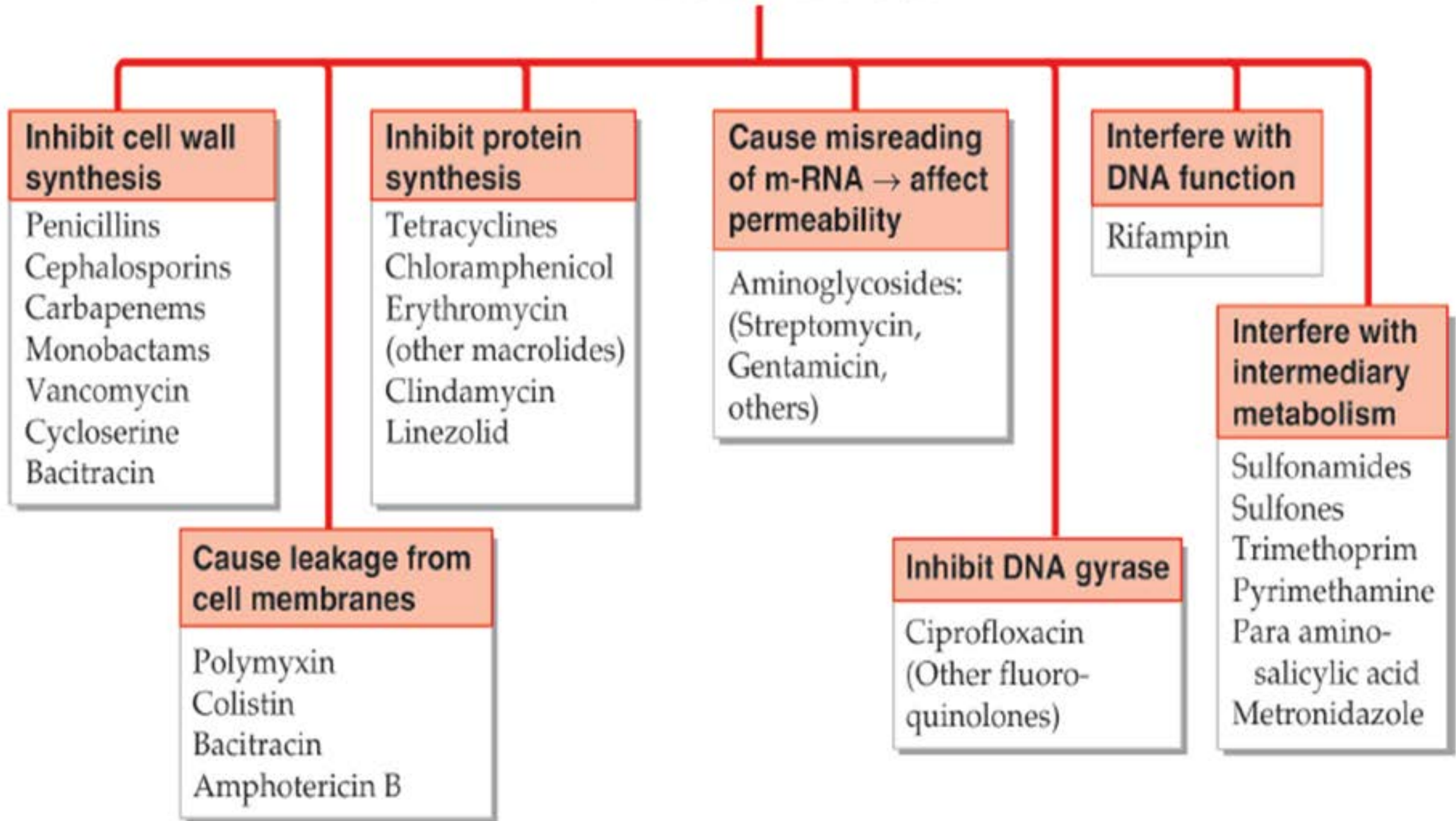
LAXATIVES **(Purgatives, Cathartics)**



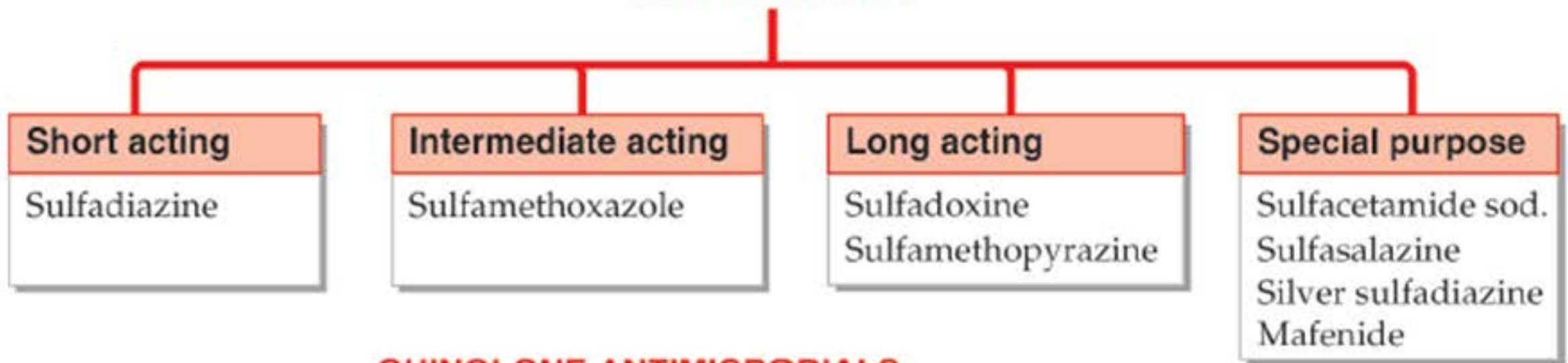
DRUGS FOR DIARRHOEA



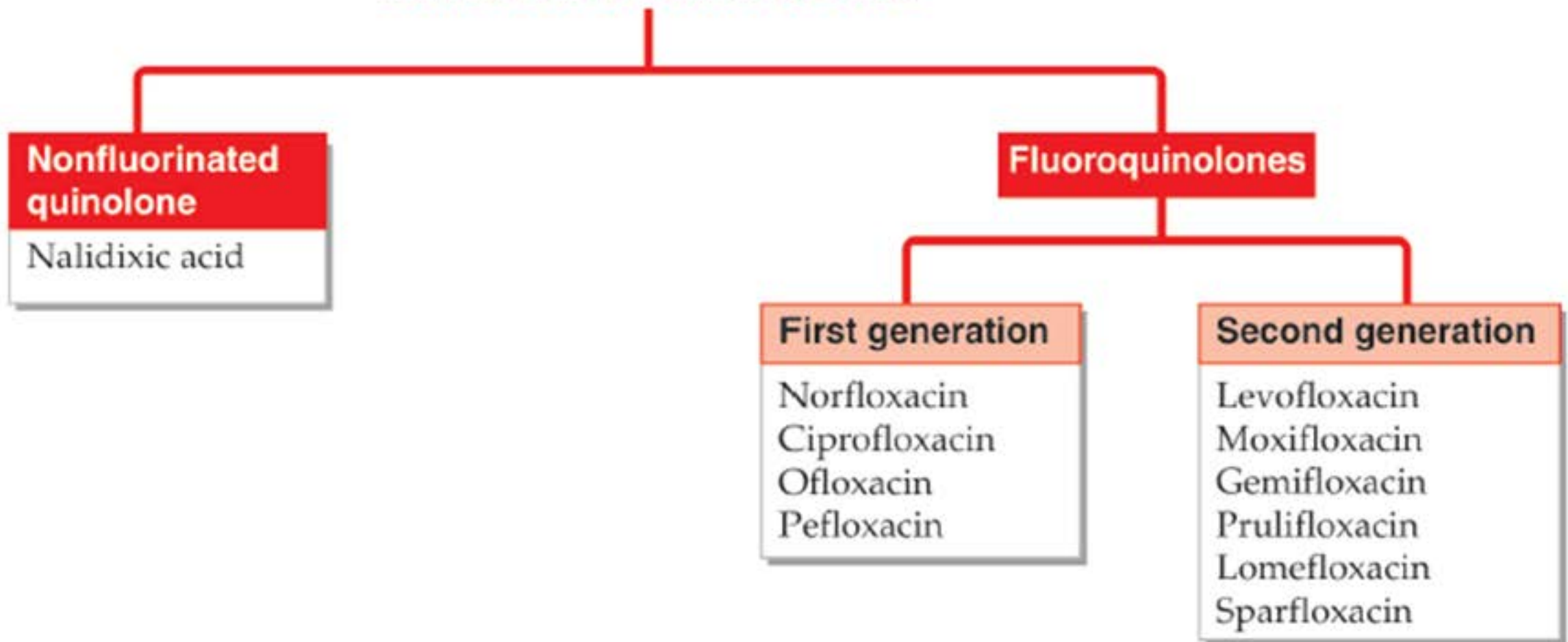
ANTIBACTERIAL DRUGS



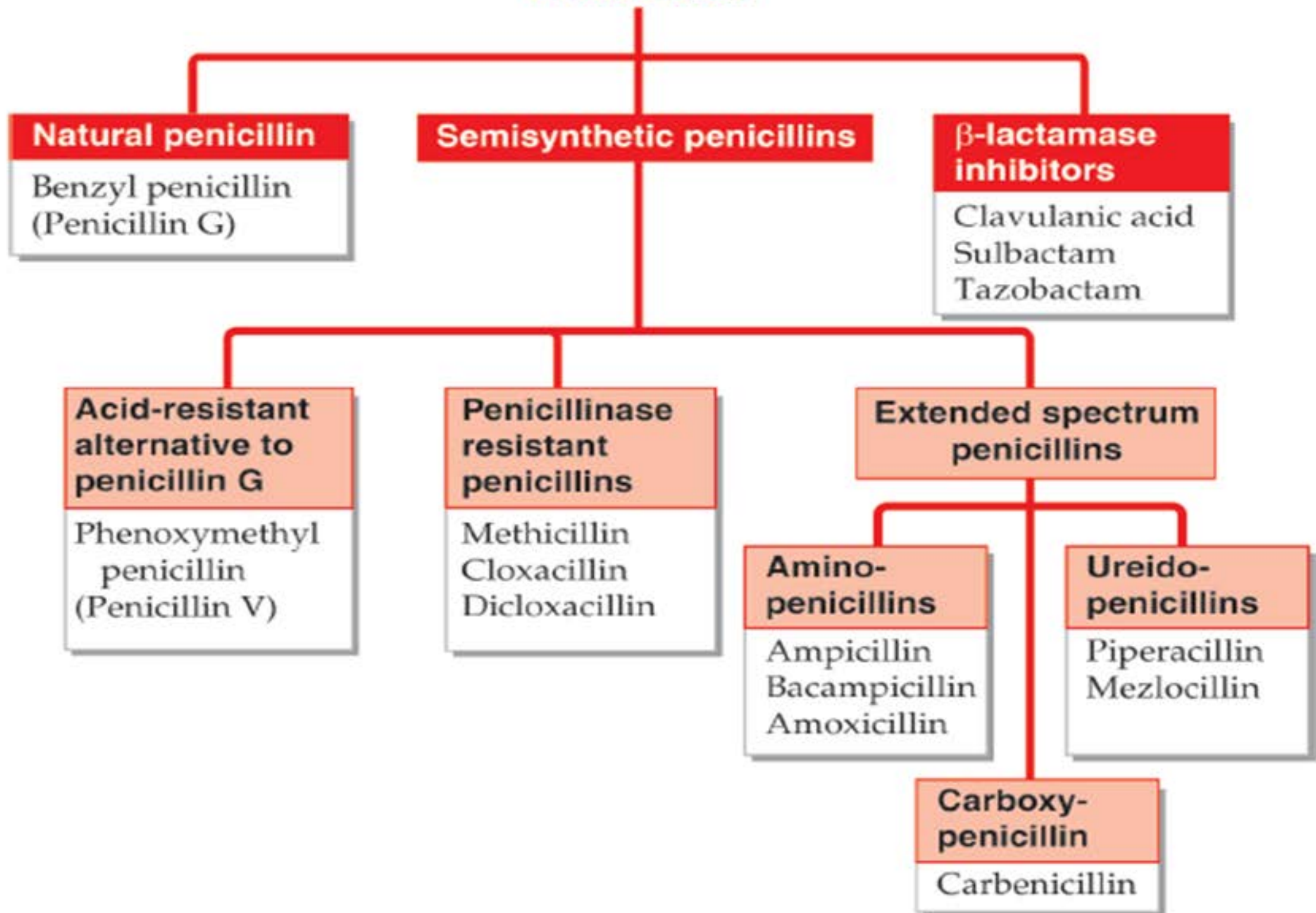
SULFONAMIDES



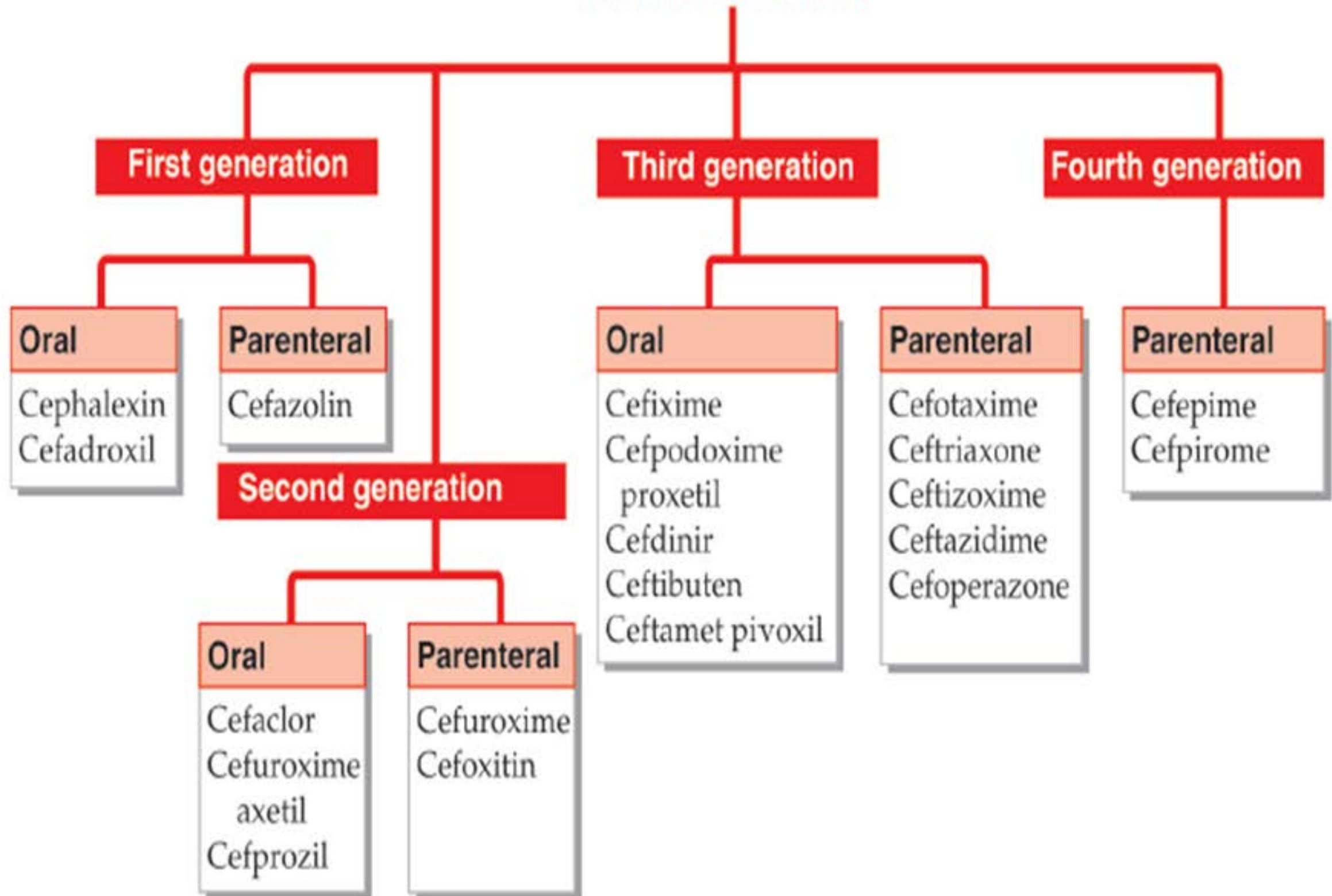
QUINOLONE ANTIMICROBIALS



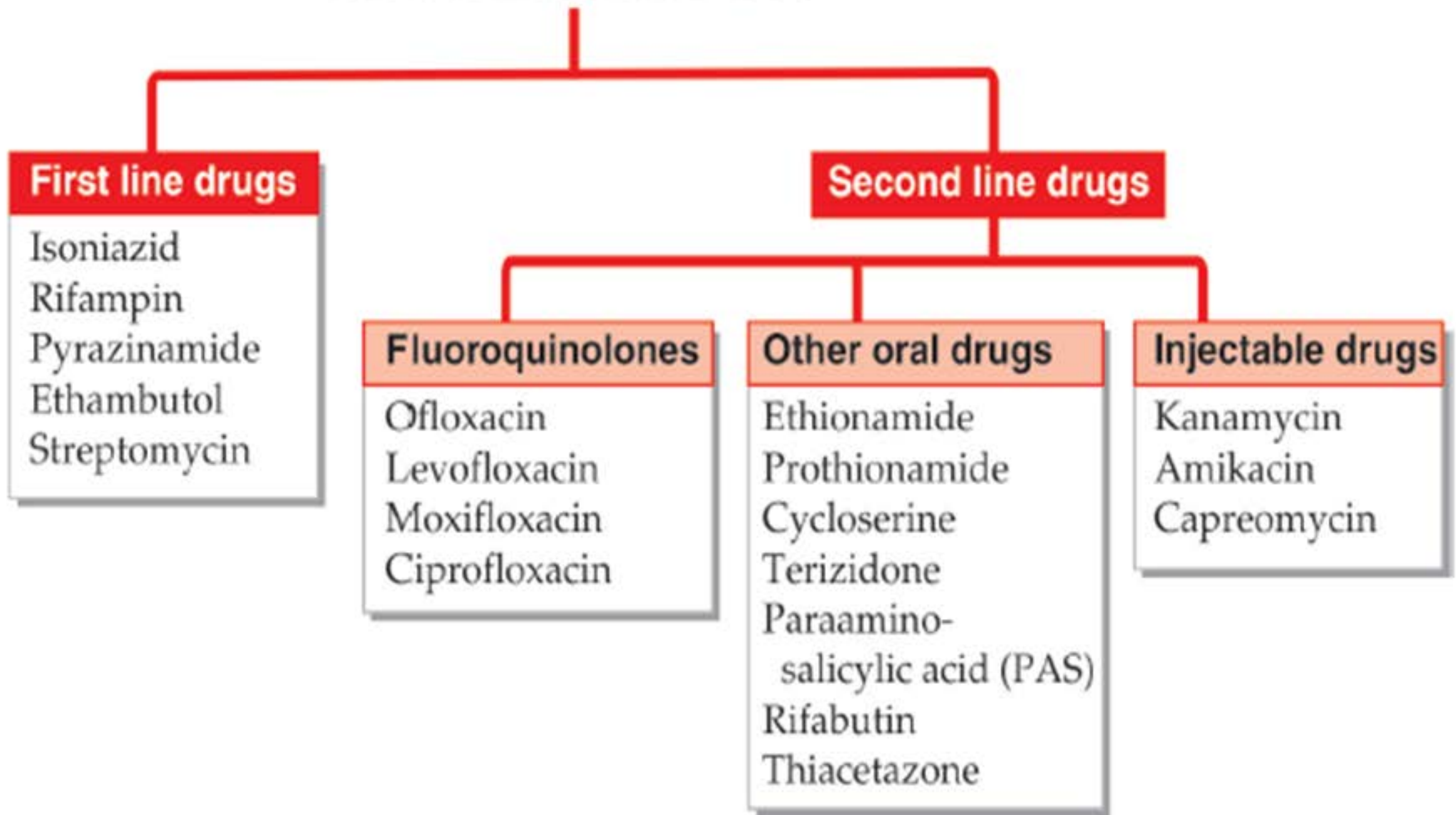
PENICILLINS



CEPHALOSPORINS

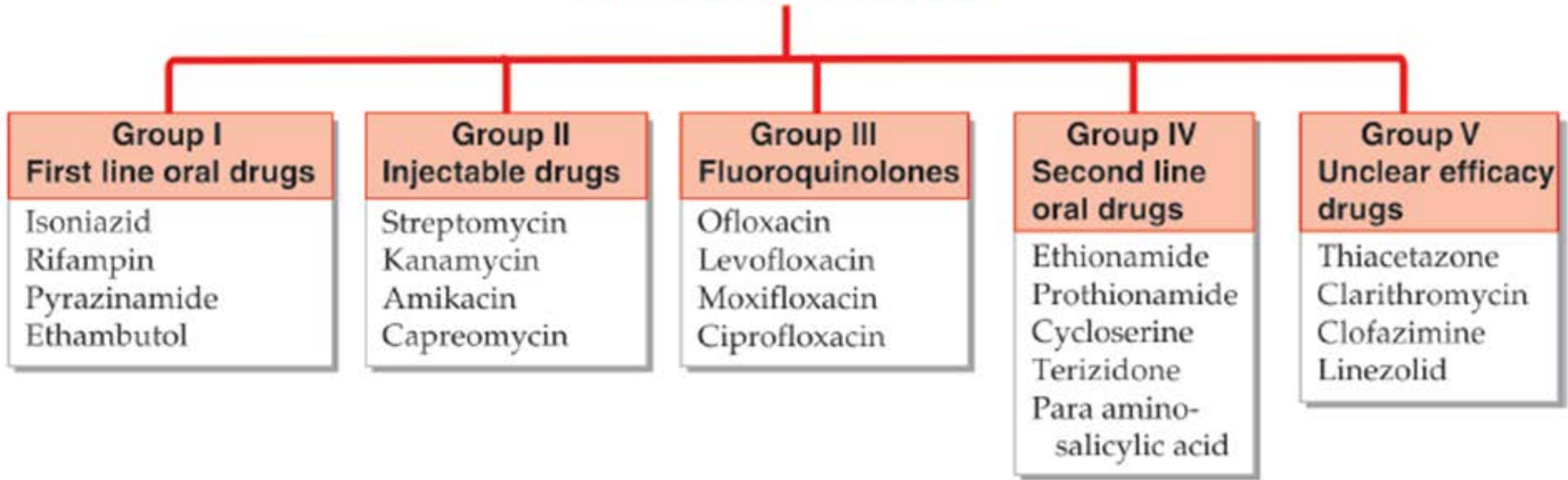


ANTITUBERCULAR DRUGS

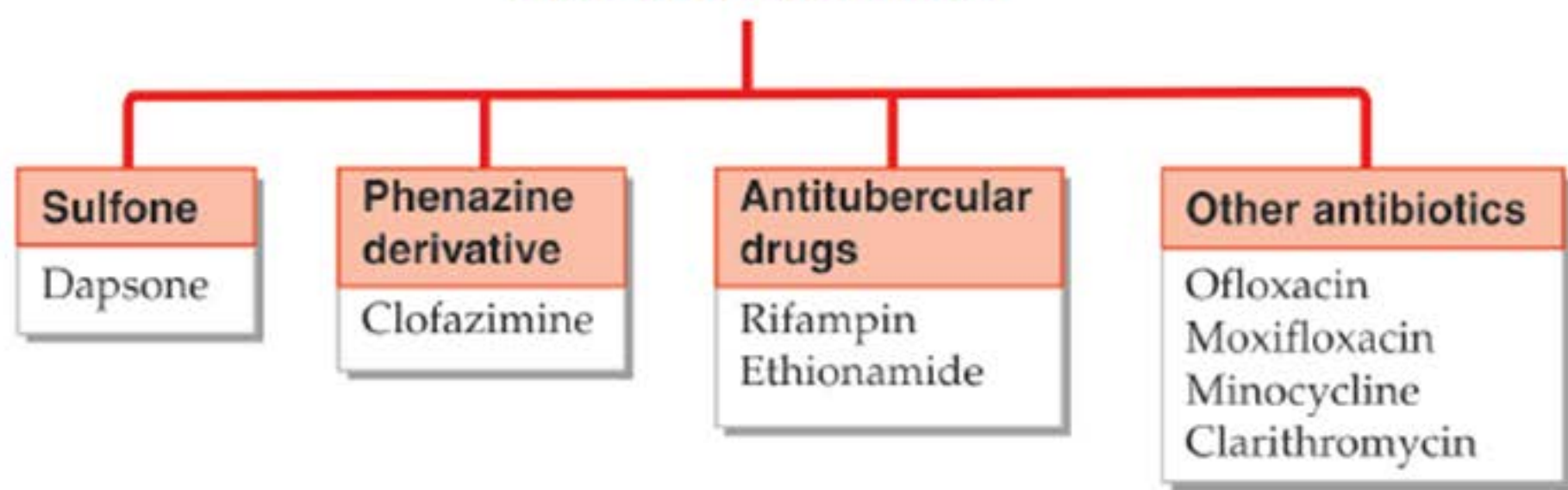


ALTERNATIVE CLASSIFICATION

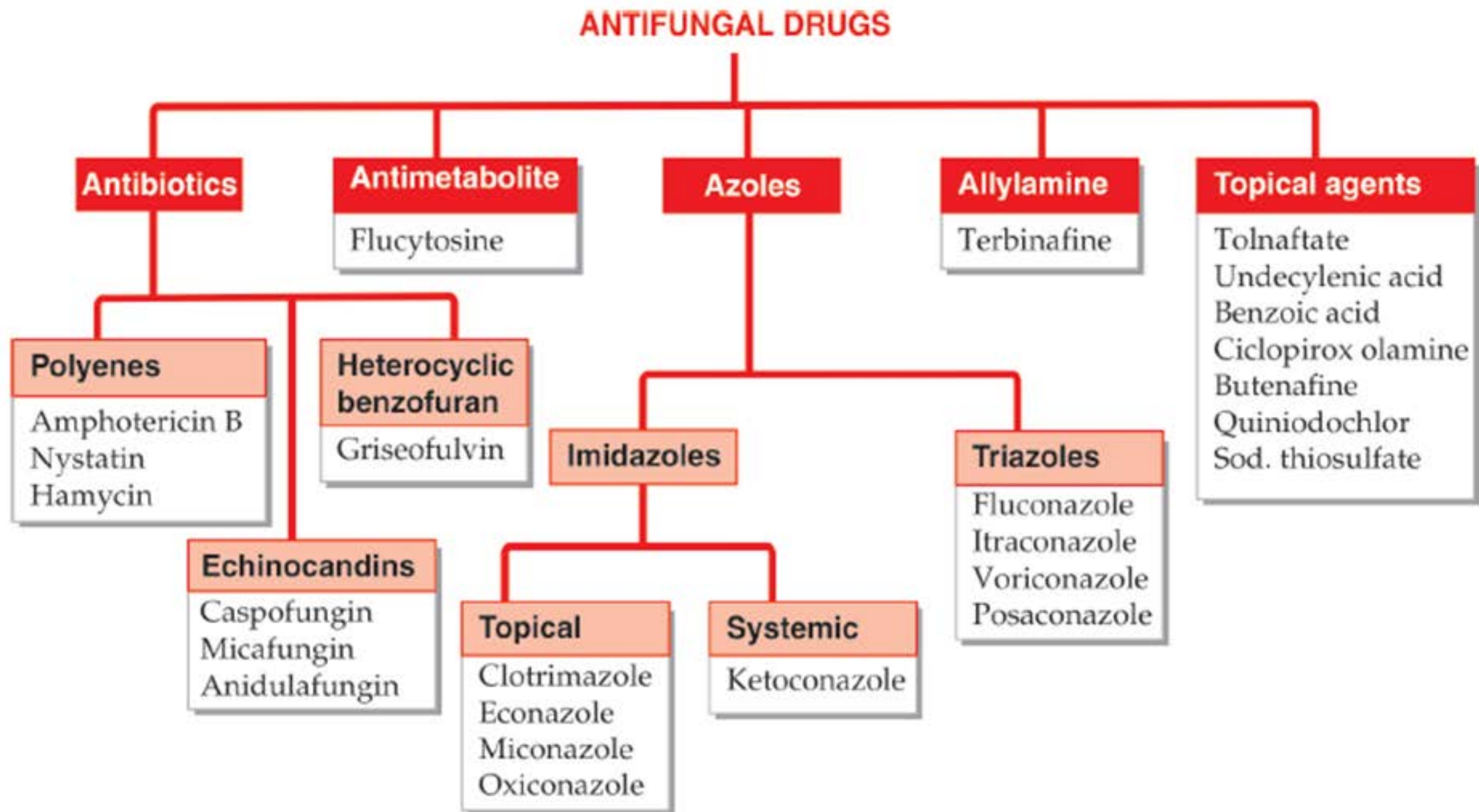
ANTITUBERCULAR DRUGS



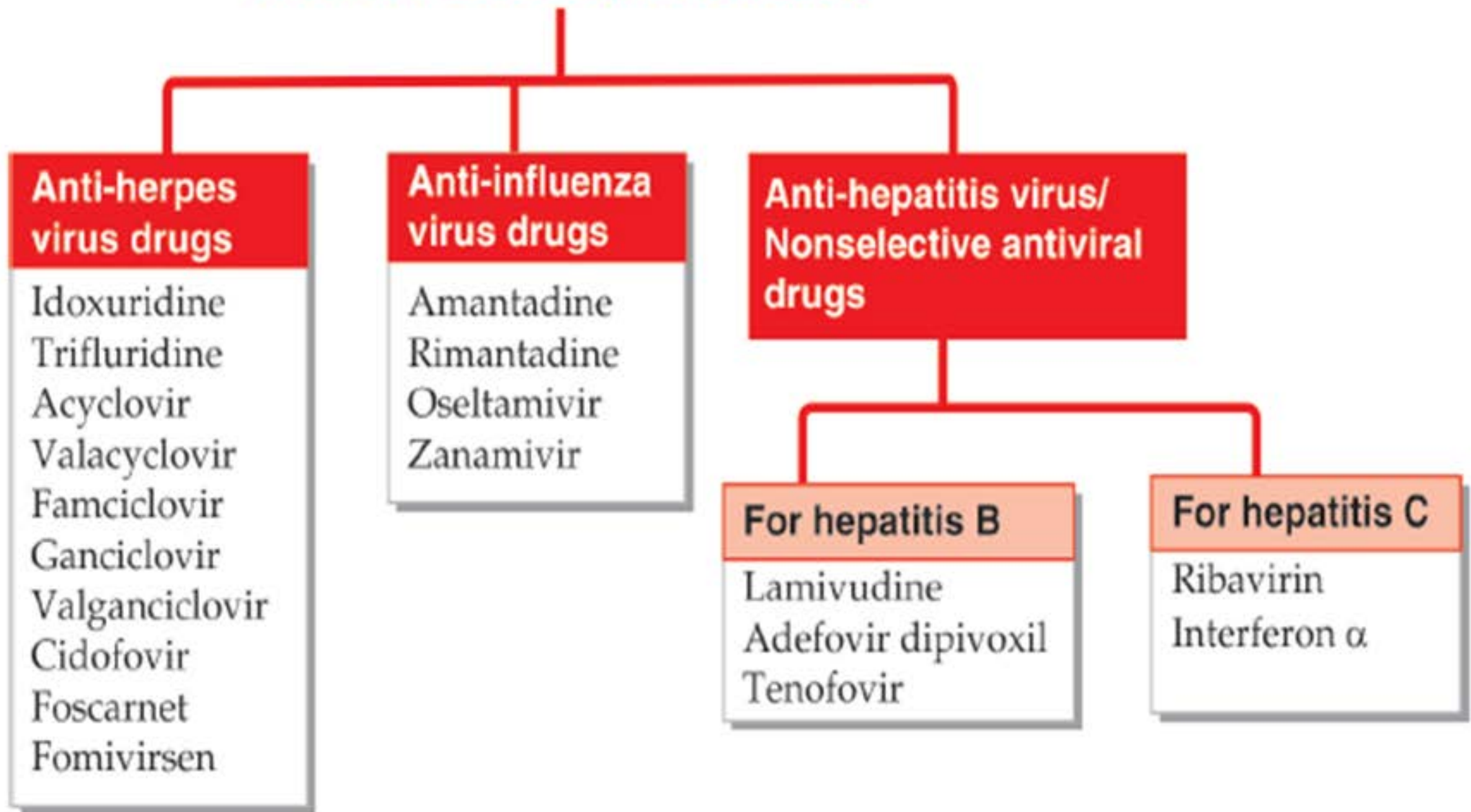
ANTILEPROTIC DRUGS



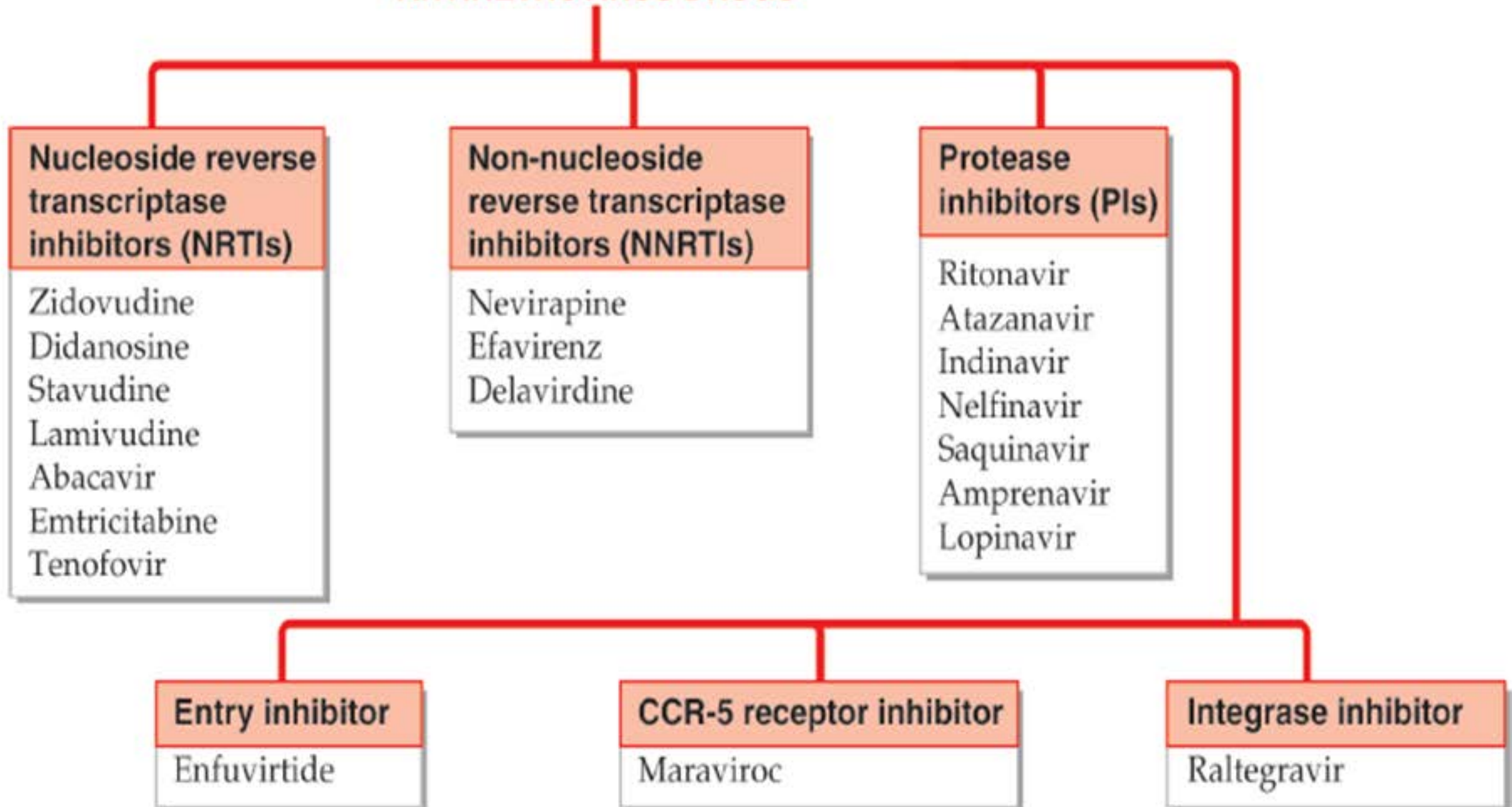
Antifungal, Antiviral, Antiprotozoal and Anthelmintic Drugs



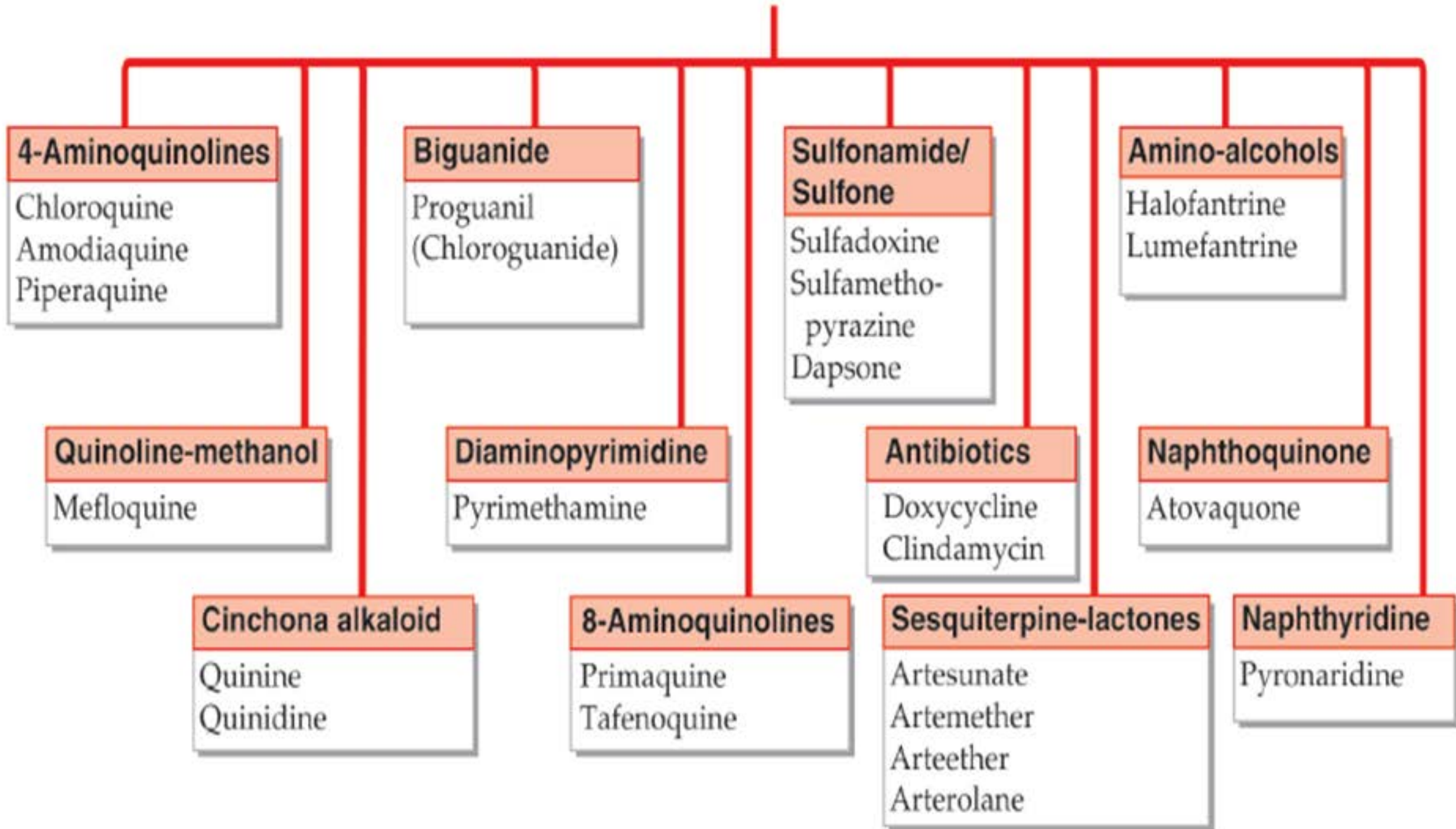
ANTIVIRAL DRUGS (Non-retroviral)



ANTIRETROVIRUS DRUGS



ANTIMALARIAL DRUGS



ANTIAMOEBIIC DRUGS

Tissue amoebicides

For intestinal +
extraintestinal
amoebiasis

For extra-
intestinal
amoebiasis only

Chloroquine

Nitroimidazoles

Metronidazole
Tinidazole
Secnidazole
Ornidazole
Satranidazole

Alkaloid

Emetine
Dehydroemetine

Luminal amoebicides

Amides

Diloxanide furoate
Nitazoxanide

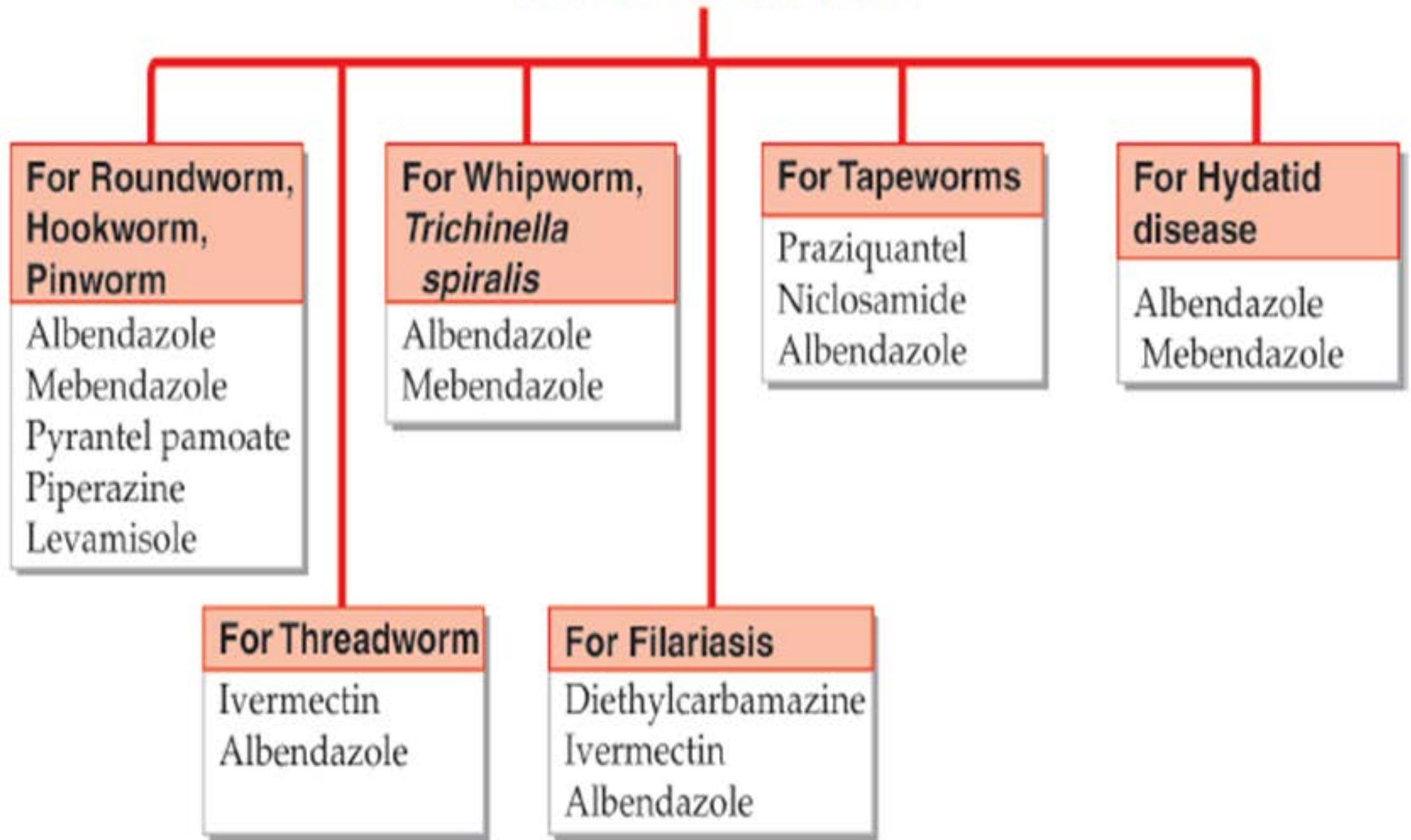
Antibiotics

Tetracycline
Paromomycin

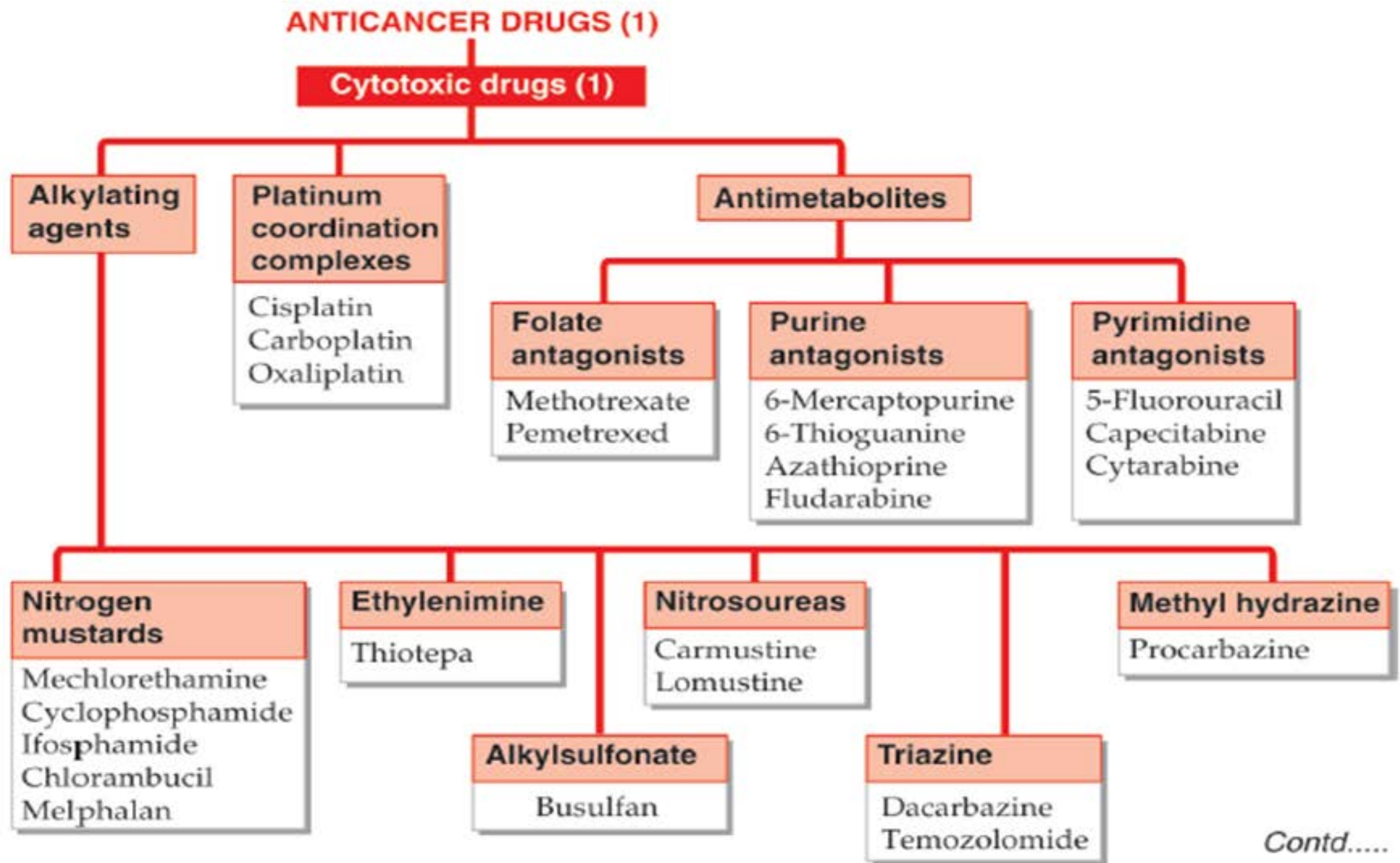
8-Hydroxyquinolines

Quiniodochlor
(Iodochlorohydroxyquin)
Diiodohydroxyquin
(Iodoquinol)

ANTHELMINTIC DRUGS



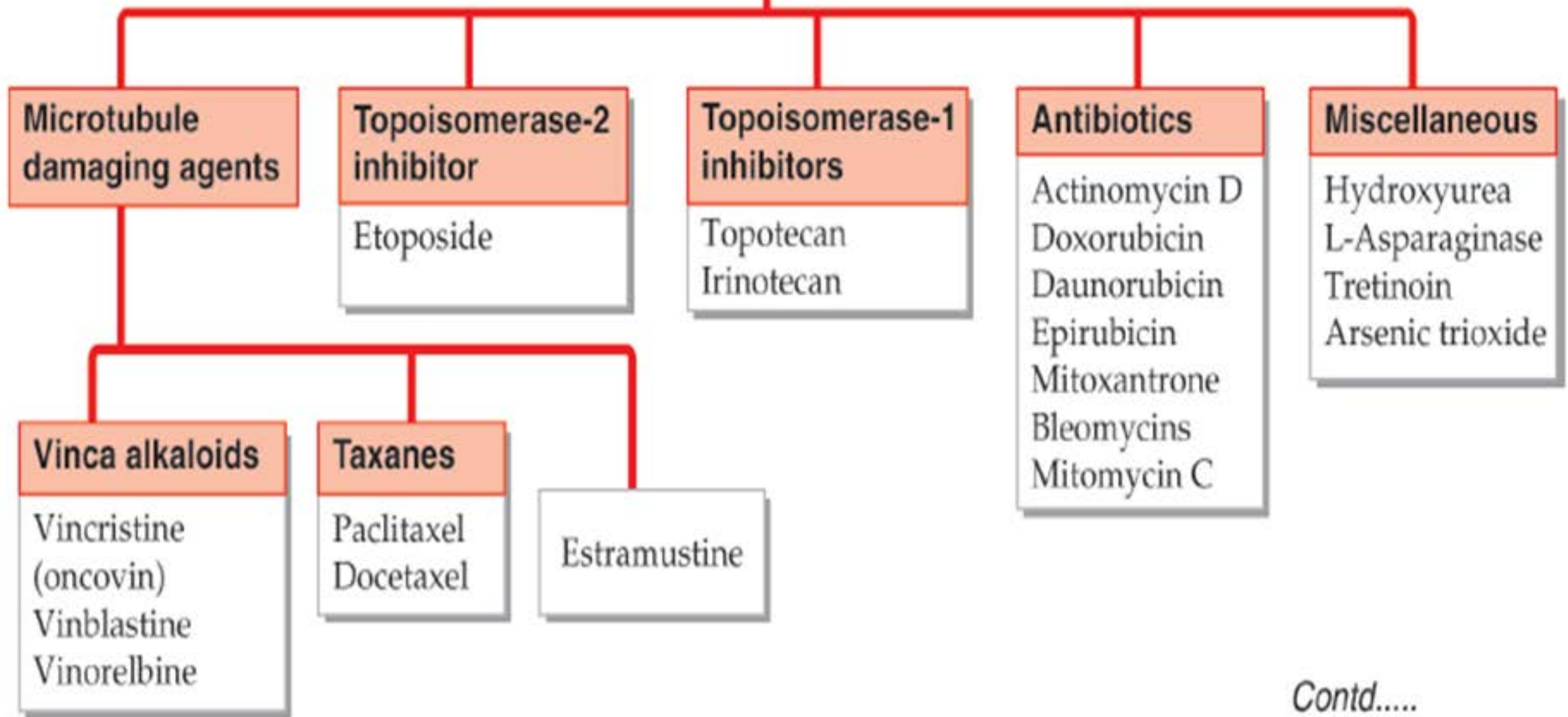
Anticancer Drugs (Antineoplastic Drugs)



Contd.....

ANTICANCER DRUGS (2)

Cytotoxic drugs (2)



Contd.....

ANTICANCER DRUGS (3)

Targeted drugs

Tyrosine protein kinase inhibitors

Imatinib
Nilotinib

EGF receptor inhibitors

Gefitinib
Erlotinib
Cetuximab

Angiogenesis inhibitors

Sunitinib
Bevacizumab

Proteasome inhibitor

Bortezomib

Monoclonal antibody

Rituximab

Hormonal drugs

Glucocorticoids

Prednisolone
(others)

SERMs

Tamoxifen
Toremifene

Aromatase inhibitors

Letrozole
Anastrozole
Exemestane

5 α -reductase inhibitors

Finasteride
Dutasteride

Progestins

Hydroxy-
progesterone
acetate (others)

Estrogens

Ethinyl estradiol
Fosfestrol

SER-down regulator

Fulvestrant

Antiandrogens

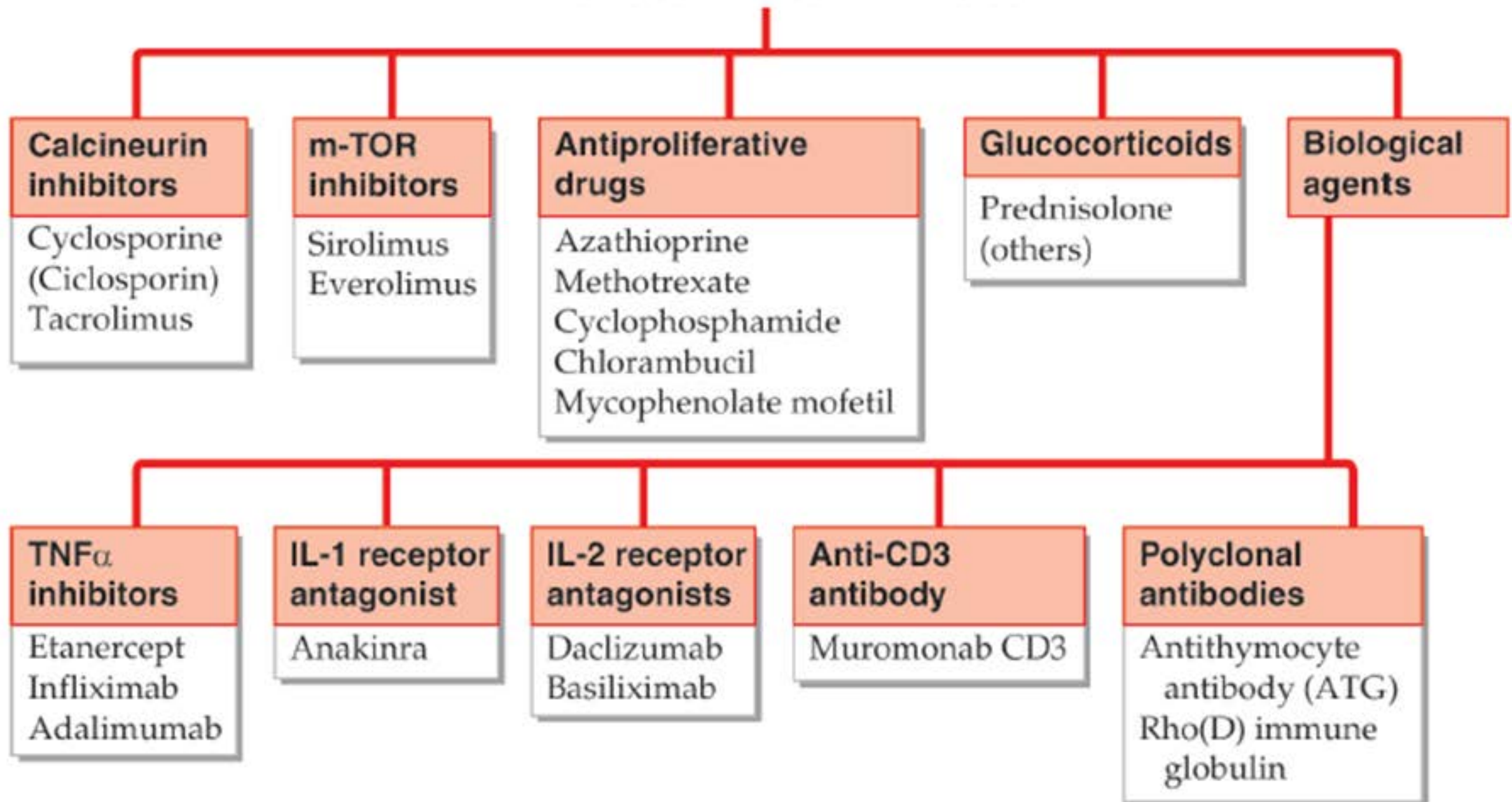
Flutamide
Bicalutamide

GnRH analogues

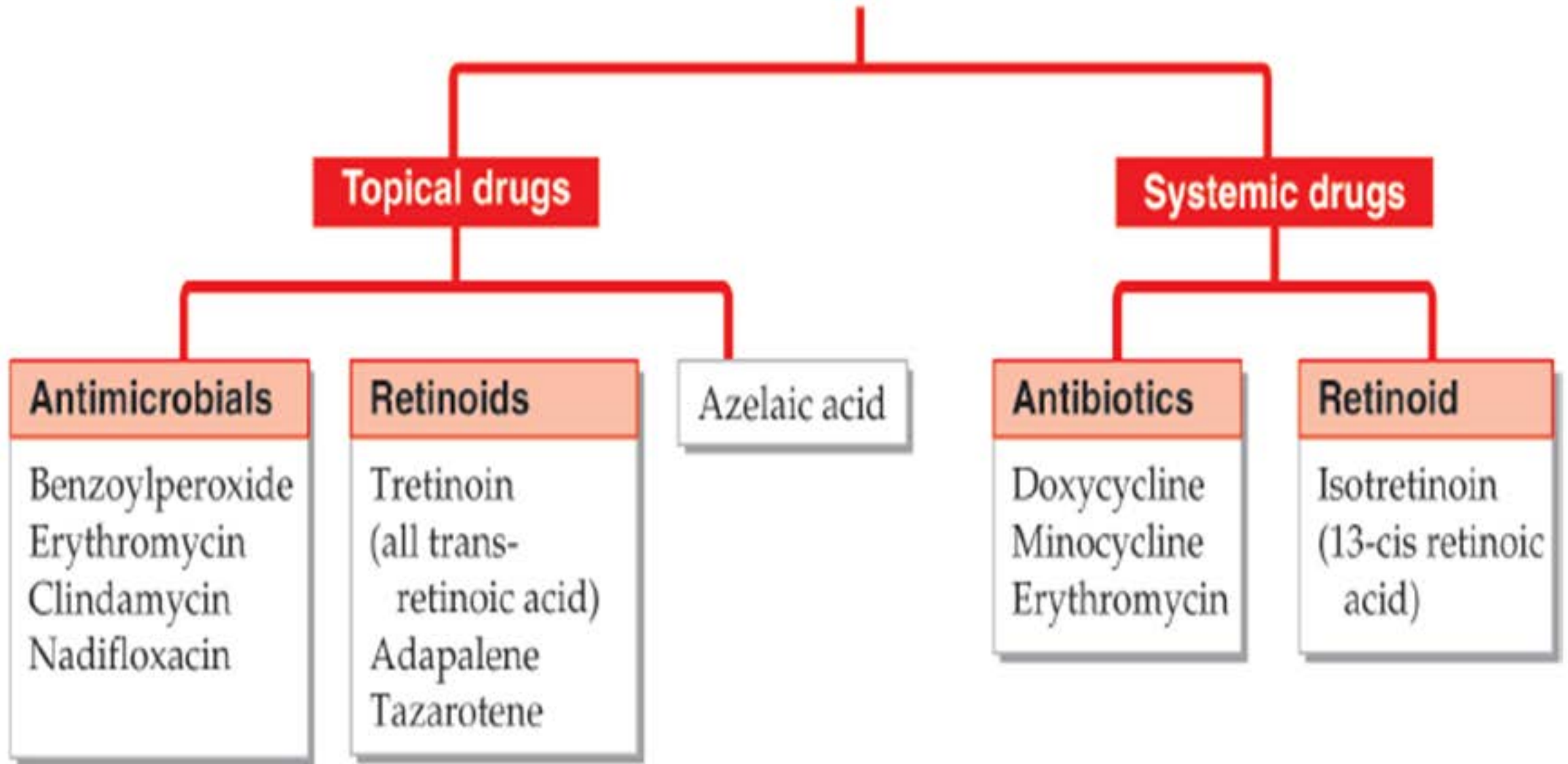
Nafarelin
Leuprorelin
Triptorelin

Miscellaneous Drugs

IMMUNOSUPPRESSANT DRUGS



DRUGS FOR ACNE VULGARIS



VACCINES

Killed (inactivated) vaccines

Bacterial

Typhoid - paratyphoid (TAB)
Vi Typhoid polysaccharide
Cholera
Whooping cough (Pertussis)
Meningococcal
Haemophilus influenzae
type B
Plague

Viral

Poliomyelitis inactivated
(IPV; Salk vaccine)
Rabies (Neural tissue)
Rabies (chick embryo cell;
PCEV)
Rabies (Human diploid
cell; HDCV)
Rabies (Vero cell; PVRV)
Influenza
Hepatitis B
Hepatitis A

Combined vaccines

Double antigen: Diphtheria toxoid + tetanus toxoid (DT-DA)
Triple antigen: Diphtheria toxoid + tetanus toxoid + pertussis vaccine (DPT)
Pentavalent vaccine: DPT + Hepatitis B + *H. influenzae* type B vaccines
Measles + mumps + rubella vaccine (MMR)

Live attenuated vaccines

Bacterial

Bacillus
Calmette-
Guerin (BCG)
Typhoid Ty 21a
(oral)

Viral

Poliomyelitis oral
vaccine (OPV, Sabin)
Mumps (Live atte.)
Measles (Live atte.)
Rubella (Live atte.)
Varicella (Live atte.)

Toxoids

Tetanus (fluid / adsorbed)
Diphtheria (adsorbed)