Histamines

Agonists

1) Histamine & Compound 48/80: non-specific
2) Apromidine: H2 specific
3) Betahistine: a partial agonistic antagonist; H3 specific

Antagonists

1) Classical Antihistamines: H1 specific
2) –tidine: H2 specific
3) Betahistine: a partial agonistic antagonist; H3 specific

Release Inhibitors

Mast cell Stabilizers

1) Crom. Sodium & Nedo. Sodium: by inhalation and eye drops
2) Ketotefen: orally

↑cAMP

1) EP
2) Isoproterenol
3) Thiophylline

Antihistamines

Sedating (1st gen.)

Non-Sedating (2nd gen.)

1) –fenadine
2) –loratadine
3) Critizine
4) Astemizole

Eicosanoids

PROSTAGLANDINS

Synthesis Inhibitors

PLA2 Inhibitors

GCs, Phenothiazine, Local anesthetic, Anti-malarial agents

COX Inhibitors

Non-selective: *NSAIDs* -> inhibit COX1 & 2
Selective: *-coxib* -> inhibit COX2 only

THROMBOXANES

Synthesis Inhibitors

1) *Dazoxiben*
2) *Hydralazine*

LEUKOTRIENES

Lipoxygenase Inhibitors

Zileuton

Leukotriene Antagonists

-lukast

NOTES

1) Any drug containing –prost– is a PG
2) If the drug ends with a –prost, it is a uterine contractor
   all are abortifacients except Carboprost; inhibits postpartum hemorrhage
3) **Miso**prostol: peptic ulcer disease
4) **Alprostadil**: patent ductus arteriosus
5) **Epo**prostenol: Raynaud's Disease .. Peripheral Vascular Disease .. Antiplatelet

Serotonin (5-HT)

Synthesis Inhibitors

1) *P-chlorophenylalanine*: inhibits *Trp Hydroxylase*
2) *Methyl dopa*: inhibits *a.a. Decarboxylase*

MAO Inhibitors

1) Parglyine
2) Tranylcypramine

Agonists

1) *Dexfen*: appetite suppressant; increases release, inhibits uptake, agonist.
2) *Soma*: 5-HT1 specific; Migraine; SE: chest pain (CA disease)
3) *Bus*: 5-HT1 specific; Anxiety
4) *Cis*: 5-HT4 specific; gastroesophygeal reflux; SE: long QT syndrome
5) *Ergotamine*: partial agonist; non-specific

Reuptake Inhibitors

Selective: *Fluox*, *Flu*, *Ser* -> for depression
Non-selevtive: *TCA's* -> for depression

Release Inhibitors

Octreotide -> for Carcinoid syndrome and Diarrhea

Antagonists

1) Ergot Alkaloids (LSD, Methysergide): for Migraine and Carcinoid
2) Cypro**hepta**dine: for Allergy, Carcinoid, Cushing's
3) Ketanesrin, Phenothiazine: Anti-serotonin and **α-blocker**
4) –Setron: 5-HT3 specific

Kinins

If Low Kinin Levels

1) Kinin analogs
2) ACE inhibitors (to inhibit metabolism)
3) Padutin: a kallikrein analog

If High Kinin Levels (shocks, Inflammation)

1) Kinin antagonists
2) Aprotinin: a Kallikrein inhibtor
3) Plasmin Inhibitor -> to stop bleeding

Diseases

Disease	Drug
Meniere's disease	Betahistine
Raynaud's disease	Epoprostenol
Migraine	Agonist (soma) Antagonist (ergot alkaloids)
Carcinoid Syndrome	Release inhibitors (Octreotide) Antagonists (ergot alkaloids, cyproheptadine)
Peptic Ulcer Disease	Mesoprostol
Hay fever	Histamine Release inhibtors (as prophylaxis)
Lewis Triple Response	Histamine
Patent Ductus Arteriosus	Alprostadil

Endocrine Pharmacology

1) Clonidine (a beta-antagonist)

   ↑ GH release **↓PRL secretion**

2) Bromocriptine (DA agonist)

   ↓PRL secretion **↑ GH release** (in normal ppl) **↓GH release** (in acromegalics)

3) Cabergoline // Bromocriptine // MAO inhibtors

4) Somatropin // Somatrem

   GH analogs

5) Mecasermin

   IGF-1 analog

6) Mecasermin Rinfabate

   IGF-1 + binding protein-3

7) Pegvisomant

   GH antagonist