Drug name	uses	Side effects	$T_{1/2}$	Route of administration	notes
somatostatin			Very brief		-Inhibits the secretion of growth hormone. -14-amino acid peptide -Inhibition of secretion of[GH TSH PRL ACTH Insulin Glucagon Pancreatic polypeptide(PP) Gastrin Cholecystokinin(CKK) Secretin Vasoactive intestinal peptide(VIP) Exocrine pancreas secretion] -inhibition of bile flow -Inhibition of mesenteric blood flow -Decreases gastrointestinal motility
Octreotide (sandostatin)	-Acromegaly -Diarrhea associated with neuroendocrine tumors such as insulinomas or carcinoid tumors -Diarrhea associated with AIDS that doesn't respond to other treatments.	-GI discomfort -Decreased glucose tolerance. -Formation of gallstones.	Longer than somatostatin (more stable)	Depot injection (monthly)	-8-amino acid analogue of somatostatin
GnRH (gonadorelin)	Low dose and pulastile: Pituitary and gonadal stimulation High dose and constant: Pituitary and gonadal stimulation followed by suppression for 2 weeks		7 minutes		-Stimulates the production of Luteinizing hormone (LH) and Follicle stimulating hormone (FSH) from anterior pituitary -Released in bursts at regular intervals (every 2 hours) -the response depends on the concentration and the mode of administration -Part of the desensitization of GnRH is caused by a decreased number of pituitary receptors.
Lutrepulse (GnRH or gonadorelin)	-is used to cause ovulation in women who do not have a period (when FSH and LH are low and no produced GnRH)			IV in pulses through a pump	
Goserelin	palliative treatment for reduction of prostate cancer growth		Long acting		-suppresses gonadotropin after initial stimulation -a potent derivative of GnRH
Ganirelix	Used to prevent premature ovulation in women undergoing ovarian stimulation as part of fertility treatment			Monthly injection	-Gonadotropin suppressor
Growth hormone (somatotropin)					-191- amino acid peptide Required during childhood and adolescence for attainment of normal adult size -Has important effects throughout postnatal life on lipid and carbohydrate metabolism, and on lean body mass. -Effects are primarily mediated via insulin-like growth factor 1 (IGF-1, somatomedin C) and, to a lesser extent through insulin-like growth factor 2 (IGF-2)

Drug name	uses	Side effects	$T_{1/2}$	Route of administration	Notes
Somatotropin (humatrope)	-growth failure of pediatric patients -Improved metabolic state, increased lean body mass, sense of well-being in adults with GH deficiency -Increased lean body mass, weight, and physical endurance and wasting in patients with HIV infection -Improved gastrointestinal function in short bowel syndrome in patients who are also receiving specialized nutritional support			Subcutaneous in the evening	-A recombinant form of growth hormone (GH) -Has the same amino acid sequence
β blockers (lol)	hypertension				-Inhibiting renin angiotensin aldosterone system (raas) -β1 blockers inhibit renin release
Remikiren					-inhibit renin release (renin antagonists)
Enalkiren					
Aliskiren					
Captopril					Angiotensin converting enzyme (ACE) inhibitors
Enalapril					
Benazapril					
Candesartan					Angiotensin II receptor blockers (ARBs)
Losartan					
Irbesartan					
Telmesartan					
Eplerenone					Aldosterone antagonists
spironolactone					
aldosterone	hypotension	-hypertension -hypokalemia -metabolic alkalosis due to H^+ excretion			
o,p'-DDD (Mitotane)	-adrenal cancer when radiotherapy and surgery are not feasible -breast cancer				-Steroid synthesis inhibitor that causes selective atrophy of Zona Fasciculata and Zona Reticularis
Aminoglutethimide					Selective desmolase inhibitor and non selective aromatase inhibitor
Trilostane	-cushing syndrome -breast cancer				Competitive inhibitor of 3β-hydroxysteroid dehydrogenase enzyme
ketoconazole	-cushing syndrome -prostate cancer				-Antifungal agent -Inhibitor of different hydroxylases -Inhibits steroidogenesis in adrenals and testes
Amphenone B					-Steroid synthesis inhibitor that inhibits different hydroxylases -Toxicity : antithyroid effect, severe CNS depression, GIT upset and many skin disorders
Metyrapone (Metopirone)	-diagnostic(metyrapone test) -cushing syndrome				Steroid synthesis inhibitor that inhibits 11 β-hydroxylase inhibitor

Drug name	uses	Side effects	$T_{1/2}$	Route of administration	Notes	
Cortisol	- Adrenal insufficiency: e.g. acute; chronic, Addisonian crisis, Addison's disease (Given in small physiological doses) -Inflammatory conditions: e.g. rheumatoid arthritis, systemic lupus erythematosus (SLE), arteritis, dermatomyositis, cerebral edema, ulcerative colitis, rheumatic carditis, active chronic hepatitis, proctitis, acute gout -Allergic reactions by decreasing histamine release and decreasing eosinophils: e. g. hay fever, eczema, dermatitis, bronchial asthma, status asthmaticus - Immunosuppression: organ transplantation, hemolytic anemia, leukemias, many tumors -Hypercalcemia associated with Vitamin D intoxication or sarcoidosis or hyperparathyroidism or cancer -Many eye, ear, and skin diseases (allergic or inflammatory)	-Suppression of hypothalamic-pituitary-adrenal axis(Major and most dangerous side effect) -**rapid** therapy stop causes Withdrawal syndrome (anorexia, Nausea, Vomiting, weight loss, lethargy, headache, fever, joint and muscle pain, and postural hypotension) -Cushing's syndrome - Salt & water retention -edema -hypokalemia -Hypertension -obesity - Peptic ulcer disease -GIT ulcerations -Osteoporosis -Diabetes mellitus -Viral and fungal infections -Delayed wound healing -skin atrophy -myopathy -Suppression of growth in children -Cataract	10 hours (short acting)	Available in all dosage forms and many preparations		-Metabolism in the liver by reduction and conjugation (90-95%) and little hydroxylation reactions (5%) -If treatment extends more than two weeks patient should be given supplementary therapy at times of stress and treatment should be tapered slowly -Use a short-acting steroid with a minimal dose -2/3rds of the dose in the morning and 1/3rd in evening
Cortisone					-Anti-inflammatory effect =0.8cortisol -aldosterone like effect =1cortisol	
Corticosterone					-Anti-inflammatory effect =0.3cortisol -aldosterone like effect =30cortisol	
fludrocortisone					-Anti-inflammatory effect =10cortisol -aldosterone like effect =150cortisol	
Prednisone			20 hours (intermediate acting)		-Anti-inflammatory effect =4cortisol -aldosterone like effect =0.8cortisol	
Prednisolone					-Anti-inflammatory effect =5cortisol -aldosterone like effect =0.8cortisol	
Methylprednisolone					-Anti-inflammatory effect =6cortisol -no aldosterone like effect	
triamcinolone					-Anti-inflammatory effect =6cortisol -no aldosterone like effect	
beclomethasone					-Anti-inflammatory effect =6cortisol -no aldosterone like effect	
Betamethasone			50 hours (long acting)		-Anti-inflammatory effect =25cortisol -no aldosterone like effect	
dexamethasone					-Anti-inflammatory effect =30cortisol -no aldosterone like effect	
histamine					-from L-histidine -Stored inactivated granules in mast cells and basophils -2 types of release -immunologic release (IgE and antigen interaction) -drug-induced release (tubocurarine and morphine) -4 types H1-4, H1 increases IP3, H2 increases cAMP -actions: satiety effect, vasodilator,decrease blood pressure and increase heart rate, constricts bronchial muscle, stimulates GI smooth muscles, stimulates gastric acid secretion, triple Response: intradermal injection causes red spot, edema, and flare response, Pain sensation.	

Drug name		uses	Side effects	$T_{1/2}$	Route of administration	notes	
epinephrine						-physiologic antagonist of histamine	
cromolyn						-inhibit histamine release	
nedocromil							
H1 receptor antagonists	diphenyhydramine	-sedation with no abuse potential -Antinausea and antiemetic -Antiparkinsonism -Anticholinergic -Alpha blocking -Serotonin blocking -Local anesthesia -allergic reactions (more effective before exposure) -Motion Sickness and Vestibular Disturbances (Menier's Syndrome) -Nausea and vomiting of Pregnancy (Morning Sickness)	-convulsion at high doses			-1st generation -Strong sedatives because they can cross BBB. -Have autonomic(α &Muscarinic blocking effects) -Sedative effect reduces awareness of itching	-Reversible competitive binding to H1 receptors -Available without a prescription(OTC)alone, or in combination as cold preparations and sleep aids -teratogenic at rodents
	chlorpheneramine						
	Fexofenadine	-Antinausea and antiemetic -Antiparkinsonism -Anticholinergic -Alpha blocking -Serotonin blocking -Local anesthesia -allergic reactions (more effective before exposure) -Motion Sickness and Vestibular Disturbances (Menier's Syndrome) -Nausea and vomiting of Pregnancy (Morning Sickness)				-2nd generation -Less lipid soluble, so no sedative activity	
	Loratidine						
	cetrizine						
H2 receptor antagonist	cimetidine	-peptic ulcer				-Do not completely abolish acid secretion(40-60%) -Replaced by proton pump inhibitors(100% inhibition)	
	famotidine						
	nazitidine						
	ranitidine						
serotonin		No clinical application				-A vasoconstrictor released from blood clot -found in banana -from L-tryptophan (trp) -Stored, or rapidly inactivated by MAO 90% is found in the enterochromaffin cells of the GIT -found in platelets, enteric nervous system, nerve endings, and brain Involved in mood, sleep, appetite, temperature control, and pain perception Involved in depression, anxiety, migraine -actions:converted to Melatonin, Chemoreceptor Reflex(Bezold-Jarish Reflex: activation of 5-HT3 receptors in coronary arteries, leads to hypotension and bradycardia), Bronchoconstriction and hyperventilation, Vasoconstriction, Vasodilation in skeletal muscles and coronary arteries, Intact endothelium is required, Platelets aggregation, diarrhea, Carcinoid Syndrome due to a tumor of the enterochromaffin cells, Serotonin Syndrome (Due to excess serotonergic activity, fatal, skeletal muscle contraction and hyperthermia)	

Drug name	uses	Side effects	$T_{1/2}$	Route of administration	notes
enteramine					-a smooth muscle stimulant found in intestinal mucosa
buspirone	Anxiolytic but not sedative				5HT1A agonist
Sumatryptan (triptan)	Migraine (first line drug)				5HT1D/1B agonists
cisapride	Gastroesophageal reflux				5HT4 agonist
tagaserod					4HT5 agonist
fluoxitine	depression				selective serotonin reuptake inhibitor(agonist like reaction)
Phenoxybenzamine					old alpha blocker, but also 5HT blocker
Cyproheptadine	-Carcinoid -serotonin syndrome				5HT2 and H1 blocker
Ketanserine	hypertension				5HT2 blocker
Ritanserine	thrombosis				-5HT2 blocker -prevents platelets aggregation
ondansetron	Used after chemotherapy to prevent nausea and vomiting				5HT3 blocker