## **PHARMACOLOGY**

	armacoo					ug do to					60→	
Ph	armacol	kinetics				body	do t	o the	arug		DEPOLARIZED	ФREPOLARIZED
		T			<u>IANN</u>	ELS					o potential (m)	- Nar January
			CATIO					ANIC			-30 -	
Р	rimary	PiSo		ssium	•	PhICI	Phosphate IN,			HYPERPOLARIZED		
			_	Sodium OU I					loride		POLARIZED @ rest	
Se	condary	MiCo	Magr Calc	iesiun ium C		SullBi	iO		Sulfate rbonat	iN, e OUT		
		ION (	CAUSIN	NG ST	<b>TIMUL</b>	ATOR	Y &	INHI	BITOF	RY EFF	ECT	
	e Ca Na	1 + D	epolari	zatior	(stin	nulator	<b>y)</b> (	Calciu	m & S	Sodium		
	Hy K CI	- H	lyperpo	lariza	tion <b>(i</b>	nhibito	ry)	Potas	ssium	and Ch	loride	
	T'	YPES O	F RECE	PTOF	RS		D	OSE	RESF	PONSE	RELAT	IONSHIP
			Locat	ion	0	nset	• G	rade	d-Dos	se Resp	onse	
	lonotr	opic/	Ce	II			Pa	rame	ters:			
'	Ligand-		Memb		Millis	second	⊏f	fficacy	(2)	Maxim	um achi	evable
	Ion cha	nnels	IVICITIO	ianc			L	ilicac	y (C)	respon	se	
	Metabo						Ce	eiling	dose		st dose	Sant I
Ш	G-Pro		Ce		Sec	conds		(D <sub>c</sub> )		produc	es the r	naximum
	coup		Memb	rane		JO.1.00		(20)	78	respon		
	Serpe	ntine						r B	127.		needed	
Ш	Kinase	linked		Cell Minutes			Po	otenc	y (P)		e 50% c	4/1/
	T	in ti a a	Memb	rane	Williates						um resp	
IV	Transo		Nucle	eus	) H	ours		Class			e of cha	•
	III Keu/ I	Nuclear		1 2			1	Slop	e	in dose		a change
	FICH	('S LAV	V OF D	IFFUS	SION		Δn	plicat	tions:	111 0056	<del>,</del>	
	< \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u> </u>				- A - A	_			Potenc	·\/	
D	a	$Q_{dt} = \frac{1}{2}$	$\frac{O \times A \times K}{h}$	(C <sub>GI</sub> -C	C <sub>P</sub> )	$\gamma 1/$					rse Agoi	niet
J	10			11 11 1	$\wedge \lambda$	/V	-			e Antag		liot
	$\frac{Q}{dt}$	Rate of	diffusion	n //							itagonis	m
	D	Diffusio	n coeff	icient		-/\				se Resp		
-/-	A	Surface	1 /1	010111		V	1	rame		oo itooj	301100	
	K			efficient			ED <sub>50</sub> Median Effe			n Effect	ive Dose	
	1/h	Membra			<u> </u>			TD <sub>50</sub> Median Toxic Dose				
(C	GI-CP)		ncentra			nt				Measu		
					FICIENT			herap		relativ		$I = \frac{TD50}{ED50}$
	15	Part	icle Siz					Index	( ( I )	safety	,	ED50
Det	erminant	ς. ⊢——	philicity				ľ	Margi	n of			
	_		artition			Coil		Safe				
	Factors:		ficient (	K)	$K = \frac{1}{6}$	Coil CH2O				VAILA	BILITY (	F)
	Degree			n / lo	nizati	on				Parame	,	(- /
L	Lipoph		Н	1	rophili				Maxi		ug plasr	ma
U	Unioni		I	Ioniz						entratio		
N	NonPo	lar	Р	Pola	r			max	- mea	asures b	ooth rate	e & extent
A Absorbed			E	Excr	etion				- mos	st variab	ole	
Bioavailability studies:						Tr	max	Time	to reac	h Tmax		
	Abso	lute	P at	$\frac{\overline{A}}{A}$	UC nor AUC I	ıIV			- mea	asures t	he <b>rate</b>	of
	bioavailability			ys = -	AUC I	V				rption		
	Relative			$Frel = \frac{AUC\ EV\ (gen.)}{AUC\ EV\ (std.)}$			AUC Area Under the Curve					
	bioavai	lability	1.16	$A = \frac{1}{A}$	UC EV	(std.)					he <b>exte</b>	
\/△	ume of [	)istrihut	ion 17	d —	Dos	e			- mos	st impor	tant BA	parameter
V 01	uiiie Oi L	วเอเเเมนโ		$u = \frac{1}{Cc}$	ncenti	ration	L					
	· · · · · · · · · · · · · · · · · · ·	-				-						

# I. ANS

Eyes   Smooth muscle   Contraction   Radial muscle   Mydriasis   Blood vessels   Vasoconstriction   Prostate Gland   Bladder Trigone   Bladder Sphincter   Pilomotor   Goosebumps   Contraction   Presynaptic   Vasomotor center (CNS)   Postsynaptic   Vasomotor center (CNS)   Postsynaptic   Vasomotor center (CNS)   Postsynaptic   Vasomotor center (CNS)   Peripheral Swaper   Vasoconstriction   Peripheral - Vasodilation   Pe	REC	EPT	ORS		Loca	ation			Respo	nse		
Radial muscle   Mydriasis					ADRENERO	FIC 1	RECEPT	ORS				
Radial muscle   Biodo vessels   Vasoconstriction			Evec		Smooth	mus	cle	Contra	action			
Prostate Gland   Bladder Trigone   Bladder Sphincter   Pilomotor   Goosebumps   G			_ yes	·	Radial	musc	le	_				
Bladder Trigone   Bladder Trigone   Bladder Sphincter   Goosebumps					Blood	vesse	ls	Vasoc	onstriction			
Bladder Sphincter   Pilomotor   Goosebumps   Goosebump	Λlnha-1				Prostat	e Gla	nd					
Pilomotor   Goosebumps   Cutaneous Splanchnic BV   Gooseblesh	Alpiia-i				Bladder	Trigo	ne	Urinar	y Retention	n		
Presynaptic					Bladder	Sphin	cter					
Presynaptic   Vasomotor center (CNS)					Pilor	notor		Goose	•			
Presynaptic   Vasomotor center (CNS)   Central - Sedation, Depression Peripheral - Vasodilation   Peripheral - Vasodilation   Peripheral - Vasodilation   Peripheral - Vasodilation   Peripheral BV   Vasoconstriction					Cutaneous S	planc	hnic BV	Goose	eflesh			
Postsynaptic								Autore	gulation			
Postsynaptic		Pre	syna	ptic	Vasomotor of	center	(CNS)	Centra	al - Sedatio	n, Depression		
Postsynaptic	Alpha-2		_	-			,					
Heart					Vascu	lar SN	1/	•				
Heart		F U 3	LSYIIC	арис	Periph	eral B	V	vasoc	OHSUICUOH			
Renin release in Juxtaglomerular apparatus   Renin release in Juxtaglomerular apparatus								(+) inc	tropism			
Smooth Muscle   Relaxation   Dilation   Reparatus					He	eart		(+) ch	ronotropisr	n		
Smooth Muscle   Relaxation   Dilation   Relaxation   Dilation   Relaxation   Dilation   Relaxation   Dilation   Relaxation   Dilation   Neuromuscular end plates   Contraction (Tremors)   Responsibility   Dopamine   Peripheral   GIT   V GI Motility   Altered behaviour, perception, Motor activity   Dopamine   Day Satisfied   Day Sat	E	3eta-	1					` ,				
Smooth Muscle   Suxtagromerular apparatus					Kid	lnev		- 17				
Beta-2					Ttio	ПСу		Juxtag	glomerular	apparatus		
Detail   Distriction   Dist					Smooth	Muse	cle	Relax	ation	4/		
Vascular SM   Dilation					Bror	nchial	LI					
Neuromuscular end plates   Contraction (Tremors)	E	3eta-	2		9.1.1./							
Dopamine-1				0				- //\/ !!				
$ \begin{array}{ c c c c c } \hline \textbf{Dopamine-1} & Renal \& Splanchic BV & Dilation \\ \hline \textbf{Peripheral} = GIT & $\forall$ GI Motility \\ \hline \textbf{Central} = CNS & Altered behaviour, perception, Motor activity \\ \hline \textbf{Epinephrine} & B_1 = B_2 > A_1 \\ \hline \textbf{Norepinephrine} & B_1 > A_1 \\ \hline \textbf{Dopamine} & D_1 > B_1 > A_1 \\ \hline \textbf{Dopamine} & D_1 > B_1 > A_1 \\ \hline \textbf{Muscarinic-1} & Gastric Nerves & $\uparrow$ HCI secretion \\ \hline \textbf{Muscarinic-2} & Heart Nerves & (-) Inotropism & Bradycardia \\ \hline \textbf{Exocrine} & glands & Secretion \\ \hline \textbf{Muscarinic-3} & Smooth & Circular muscle: Miosis \\ \hline \textbf{Bronchial} & Constriction & Circular muscle: Miosis \\ \hline \textbf{Bronchial} & Constriction & Diarrhea Trigone/Sphincter: Relaxation & /Urination \\ \hline \textbf{Neural Nicotinic} & \textbf{N_N} & Ganglion / CNS & Stimulation \\ \hline \textbf{Neural Muscarinic} & Neuromuscular end plates / Skeletal Muscle & Contraction & (Para/Sympha) \\ \hline \textbf{G-Protein} & = \textbf{Receptor} \\ \hline \textbf{q} & Alpha-1 & \textbf{q} & M-1 & \textbf{s} & D1 \\ \textbf{i} & Alpha-2 & \textbf{i} & M-2 & \textbf{i} & D2 \\ \textbf{s} & Beta-1 & \textbf{q} & M-3 & \textbf{q} & H1 / V1 \\ \textbf{s} & Beta-2 & \textbf{s} & H2 / V2 \\ \hline \end{array}$			n T	20	Neuromuscu	lar en	d plates	Contra	action (Tre	mors)		
$ \begin{array}{ c c c c c } \hline \textbf{Dopamine 2-4} & Peripheral = GIT & $\forall$ GI Motility \\ \hline \textbf{Central} = CNS & Altered behaviour, perception, Motor activity \\ \hline \textbf{Epinephrine} & B_1 = B_2 > A_1 \\ \hline \textbf{Norepinephrine} & B_1 > A_1 \\ \hline \textbf{Dopamine} & D_1 > B_1 > A_1 \\ \hline \textbf{Dopamine} & D_1 > B_1 > A_1 \\ \hline \textbf{Muscarinic-1} & Gastric Nerves & $\uparrow$ HCI secretion \\ \hline \textbf{Muscarinic-2} & Heart Nerves & (-) Inotropism & Bradycardia \\ \hline \textbf{Exocrine} & glands & Secretion \\ \hline \textbf{Eves} & Ciliary muscle : $\uparrow$ near vision \\ \hline \textbf{Circular muscle: Miosis} \\ \hline \textbf{Bronchial} & Constriction & Circular muscle: Miosis \\ \hline \textbf{Bronchial} & Constriction & Diarrhea \\ \hline \textbf{Trigone/Sphincter: Relaxation} & /Urination \\ \hline \textbf{Neural Nicotinic} & \textbf{N_N} & Ganglion / CNS & Stimulation \\ \hline \textbf{Neural Muscarinic} & \textbf{N_M} & Ganglion / CNS & Stimulation \\ \hline \textbf{Neural Muscarinic} & \textbf{N_N} & Ganglion / CNS & Stimulation \\ \hline \textbf{Skeletal Muscle} & (Para/Sympha) \\ \hline \textbf{G-Protein} & = \textbf{Receptor} \\ \hline \textbf{q} & Alpha-1 & \textbf{q} & M-1 & \textbf{s} & D1 \\ \textbf{i} & Alpha-2 & \textbf{i} & M-2 & \textbf{i} & D2 \\ \textbf{s} & Beta-1 & \textbf{q} & M-3 & \textbf{q} & H1/V1 \\ \textbf{s} & Beta-2 & \textbf{s} & H2/V2 \\ \hline \end{array}$	4	3eta-	3		Adipose	e tissu	es	Lipoly	sis			
$ \begin{array}{ c c c c c } \hline \textbf{Dopamine 2-4} & \textbf{Central} = \textbf{CNS} & \textbf{Altered behaviour, perception,} \\ \hline \textbf{Epinephrine} & \textbf{B}_1 = \textbf{B}_2 > \textbf{A}_1 \\ \hline \textbf{Norepinephrine} & \textbf{B}_1 > \textbf{A}_1 \\ \hline \textbf{Dopamine} & \textbf{D}_1 > \textbf{B}_1 > \textbf{A}_1 \\ \hline \textbf{Dopamine} & \textbf{D}_1 > \textbf{B}_1 > \textbf{A}_1 \\ \hline \textbf{Muscarinic-1} & \textbf{Gastric Nerves} &        \textbf$	Dop	oamii	าe-1		Renal & Sp	olanch	nic BV	Dilatio	n			
$ \begin{array}{ c c c c c } \hline \textbf{Dopamine 2-4} & \textbf{Central} = \textbf{CNS} & \textbf{Altered behaviour, perception,} \\ \hline \textbf{Epinephrine} & \textbf{B}_1 = \textbf{B}_2 > \textbf{A}_1 \\ \hline \textbf{Norepinephrine} & \textbf{B}_1 > \textbf{A}_1 \\ \hline \textbf{Dopamine} & \textbf{D}_1 > \textbf{B}_1 > \textbf{A}_1 \\ \hline \textbf{Dopamine} & \textbf{D}_1 > \textbf{B}_1 > \textbf{A}_1 \\ \hline \textbf{Muscarinic-1} & \textbf{Gastric Nerves} &        \textbf$	D				Periphe	ral = 0	GIT	Ψ GI I	Motility			
	Dopa	amin	e 2-4		Contro	I CN	IC			ır, perception,		
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$				M	Centra		13	Motor	activity			
$ \begin{array}{ c c c c c c } \hline Dopamine & D_1 > B_1 > A_1 \\ \hline \hline & \textbf{CHOLINERGIC RECEPTORS} \\ \hline \textbf{Muscarinic-1} & Gastric Nerves &                                   $	/ IA	d		III	Epinep	hrine	$B_1 = B_2$	> A <sub>1</sub>				
CHOLINERGIC RECEPTORS         Muscarinic-1       Gastric Nerves       ↑ HCI secretion         Muscarinic-2       Heart Nerves       (-) Inotropism (-) Dromotropism       Bradycardia         Muscarinic-3       Exocrine glands       Secretion         Eyes       Ciliary muscle: ↑ near vision         Circular muscle: Miosis         Bronchial       Constriction         Mulls/Detrussor: Contraction       Diarrhea /Urination         Neural Nicotinic       NN       Ganglion / CNS       Stimulation         Neural Muscarinic       NM       Neuromuscular end plates / Skeletal Muscle       Contraction (Para/Sympha)         G-Protein = Receptor         q       Alpha-1       q       M-1       s       D1         i       Alpha-2       i       M-2       i       D2         s       Beta-1       q       M-3       q       H1 / V1         s       Beta-2       s       H2 / V2	/ '/\	N	V	V	Norepinep	hrine	$B_1 > A_1$					
Muscarinic-1         Gastric Nerves         ↑ HCI secretion           Muscarinic-2         Heart Nerves         (-) Inotropism (-) Dromotropism         Bradycardia           Muscarinic-3         Exocrine glands         Secretion           Eyes         Ciliary muscle: ↑ near vision           Circular muscle: Miosis           Bronchial         Constriction           Walls/Detrussor: Contraction Trigone/Sphincter: Relaxation         /Urination           Neural Nicotinic         NM         Ganglion / CNS         Stimulation           Neural Muscarinic         Neuromuscular end plates / Skeletal Muscle         Contraction (Para/Sympha)           G-Protein = Receptor           q         Alpha-1         q         M-1         s         D1           i         Alpha-2         i         M-2         i         D2           s         Beta-1         q         M-3         q         H1 / V1           s         Beta-2         s         H2 / V2			V		Dopa	mine	$D_1 > B_1$	> A <sub>1</sub>				
Muscarinic-2         Heart Nerves         (-) Inotropism (-) Dromotropism         Bradycardia           Muscarinic-3         Exocrine glands         Secretion           Smooth Muscle         Eyes         Ciliary muscle: ↑ near vision           Circular muscle: Miosis         Bronchial         Constriction           Bronchial         Constriction         Diarrhea / Urination           Neural Nicotinic         Na         Ganglion / CNS         Stimulation           Neural Muscarinic         Na         Neuromuscular end plates / Skeletal Muscle         Contraction (Para/Sympha)           G-Protein         Receptor           q         Alpha-1         q         M-1         s         D1           i         Alpha-2         i         M-2         i         D2           s         Beta-1         q         M-3         q         H1 / V1           s         Beta-2         s         H2 / V2					CHOLINER	GIC	RECEPT	ORS				
Muscarinic-2   Heart Nerves   (-) Dromotropism   Bradycardia	Muscarin	nic-1	Gas	stric N	erves	个 H(	CI secreti	on				
Muscarinic-2   Heart Nerves   (-) Dromotropism   Bradycardia	V		İ.,			(-) In	otropism					
Exocrine glands   Secretion	Muscarir	nic-2	Hea	art Ne	rves					Bradycardia		
$ \begin{tabular}{l lllllllllllllllllllllllllllllllllll$			Fxc	crine	glands	` '	•	13111				
								e: 个 ne	ear vision			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				_								
Muscle	Muscarir	nic-3			Bronchial				<del>-</del>			
Neural Nicotinic   N <sub>N</sub>   Ganglion / CNS   Stimulation			Mus	scle				or: Cor	ntraction	Diarrhea		
Neural NicotinicNometrial Normal MuscarinicNeuromuscular end plates / Skeletal MuscleStimulation Contraction (Para/Sympha)G-Protein = ReceptorqAlpha-1qM-1sD1iAlpha-2iM-2iD2sBeta-1qM-3qH1 / V1sBeta-2sH2 / V2					GII/Urinary							
Neural Muscarinic $N_M$ Neuromuscular end plates / Skeletal MuscleContraction (Para/Sympha)G-Protein = ReceptorqAlpha-1qM-1sD1iAlpha-2iM-2iD2sBeta-1qM-3qH1 / V1sBeta-2sH2 / V2	Neural N	Vicoti	nic	N <sub>N</sub>	Gar		•	I	1			
Skeletal Muscle   (Para/Sympha)								es /	1			
q         Alpha-1         q         M-1         s         D1           i         Alpha-2         i         M-2         i         D2           s         Beta-1         q         M-3         q         H1 / V1           s         Beta-2         s         H2 / V2	Neural Muscarinic N <sub>M</sub>					•	- <b>- ·</b>					
i         Alpha-2         i         M-2         i         D2           s         Beta-1         q         M-3         q         H1 / V1           s         Beta-2         s         H2 / V2					G-Protei	.n =	Recep	tor				
i         Alpha-2         i         M-2         i         D2           s         Beta-1         q         M-3         q         H1 / V1           s         Beta-2         s         H2 / V2	q		Alp	oha-1					S	D1		
<b>s</b> Beta-2 <b>s</b> H2 / V2	i		Alp	oha-2	i		M-2		i	D2		
	S		В	eta-1	q		M-3		q	H1 / V1		
Kiniss si boy, kinick ni girl kasi gusto ng sexs	S		В							$H2 \overline{/V2}$		
7, 3 3				Kinis	s si boy, kinicl	k ni gi	rl kasi gu	sto ng	sexs			

	ANS DRUGS								
				VOUS SYSTE					
	PHATHOM	METIC	C / AC	RENERGI	C AG	ONIST			
* DIRECT-ACTI									
A. Non-selective	Epinephrine		Dop	amine					
	Norepinephri	ne							
B. Selective	T								
Non selective B	Isoprotereno		Isop	prenaline					
Selective B1	Dobutamine			* partial agor		Penalterol			
	SABA	Salbuta				<u>Ferbutaline</u>			
		Metapro			<u> </u>	Pirbuterol			
Selective B2	LABA	Salmete				Bambuterol			
		Formote				ndacaterol			
	Tocolytics	Ritodrin				Tertbutaline			
		Isoxsup	rine						
Selective A1	Phenylephrin			nydrozoline		Midodrine			
PropMethPhen +	Methoxamine			etazoline		Xylometazoline			
-zoline	Propyhexedr	ine	Nafaz		0	IP			
Selective A2	Clonidine		Guant		70				
GuaMeth + -	Methyldopa		Guana			d/			
nidine	Apraclonidin		Brimo	nidine		- LAZVV			
Selective D1	Fenoldopam	-0	_	$\sim$		1 AIV			
* INDIRECT-AC					# # V	V			
A. Releasers	Tyrami			hedrine	<u>~</u>				
D D 1 1 1 1 1		tamine		eudoephedri		FO 4			
B. Reuptake Inhib		- / /	Re	eboxetine		ГСА			
CENTRALLY- Phenylpropanolar			mino/N	Aothomphoto	mino	Modofonil			
Phenterm				ite/ Mephenid		Modafenil			
Phenmetra		Wietryip		noline	ato				
_/ _/ _/ _/	PATHOLYT	ICS / A			TAC	ONIST			
❖ ALPHA BLOC	3.5		DILLI	LKGICILI	11110	011101			
1 / 1	Irreversible	Pheno	oxvben	zamine					
A. Non-Selective	Reversible		olamin		+ To	- Tolazoline			
B. Selective A1	Prazosin	Alfuzo	sin		Tera	zosin			
-zosin	Doxazosin	Tams	ulosin		Indo	ramin			
C. Selective A2	Yohimbine	Rauw	olscine	(alkaloids)					
<b>* BETA BLOCK</b>	ERS -olol/-lol								
A. Non-Selective		The re	est of -c	olols & -alols					
		Celipr	olol	Acebutolol	Sho	ortest t½: Esmolol			
B. Cardioselective	P. Cardiacalactiva			Metoprolol		gest t½: Nadolol			
	7	Bisop				9001 1, 21 1 1440101			
CDEAIVI		Betax		Nebivolol		st β sel.: Nebivolol			
CBEAIN	+ NN	Betax Esmo	lol	Nebivolol Nadolol		st β sel.: Nebivolol			
	+ NN	Betax Esmo Ateno	lol lol	Nadolol	Mos	·			
C. Instrinsic Symp	+ NN	Betax Esmo Ateno	lol lol olol	Nadolol Labetalol	Pine	dolol			
C. Instrinsic Symp Activity CLAP	+ NN hathomimetic	Betax Esmo Ateno Carte Celipr	lol lol olol	Nadolol  Labetalol Atenolol	Pine Per	dolol abutolol			
C. Instrinsic Symp Activity CLAP D. Membrane Sta	+ NN hathomimetic	Betax Esmo Ateno Carte Celipr Pindo	lol lol olol rolol lol	Nadolol  Labetalol Atenolol Acebutolol	Pine Per	dolol			
C. Instrinsic Symp Activity CLAP	+ NN hathomimetic	Betax Esmo Ateno Carte Celipr Pindo Propra	lol lol olol rolol lol anolol	Nadolol  Labetalol Atenolol Acebutolol Labetalol	Pine Per	dolol abutolol			
C. Instrinsic Symp Activity CLAP D. Membrane Sta	+ NN hathomimetic	Betax Esmo Ateno Carte Celipr Pindo	lol lol colol lol anolol alol	Nadolol  Labetalol Atenolol Acebutolol	Pine Per	dolol abutolol			

		PAF	RASYMPHA	THET	TIC I	NERVOL	JS S	SYSTEM		
PA	RASY	MPA	THOMIM	ETI	<u>C /</u>	CHOLI	NE	ERGIC AGO	ONIST	
❖ DIRECT	ACTIN									
A. Choline	A. Choline Esters		Mixed (M and N) CAM			Carbachol A		etylcholine	Metacholine	
		Mus	carinic	Be	thar	nechol				
		Mixe	ed	Are	ecol	ine				
B. Alkaloids	8	Nico	tinic only	Nic	cotin	ne	Va	renicline	Lobeline	
	Muscarinio					rine	Pile	ocarpine		
♦ INDIRECT	CT-ACT	ING						Chemi	ical & DOA	
A. Short Ac	ting		Edrophoniu	um				Aminoalcoh	nol (15-30mins)	
B. Intermed	liata act	tina	Physostign	nine/ I	Eser	ine		Carbamate	<u> </u>	
	mine)	urig	Pyridostign			benoniur		(2-8hrs; <24		
( Stigi			Neostigmir	ne	Der	necarum		(2 01110, \2	+1110. <i>j</i>	
	_		Echothiopa	ate	Tab			Organopho	sphates	
C. Very Ion	g-acting	)	Malathion		Sar			•	ays to weeks)	
			Parathion		Son				- 0	
D. CNS-act	•		Rivastigmi			nepezil		Riva is tact, she's done		
(Alzheimer'			Tacrine			alantami			th gala	
			IATOLYTI	IC/ C	HC	LINE	KG1	C ANTAGO	ONIST	
ANTI-MU		INIC			0 E	12	Α		1//	
A. Atropine			- 1	Scop	olar	mine	1	Biperiden	1~~	
	CNS		- 101			henidyl		Benztropin	е	
		2(	) 0 -	Atrop			1	Cyclopento		
		ycloplegic	Homatropine			M	Panistropir			
TIL	-tropin	е		Scopolamine			A	Tropicamio		
F	Bronch	nodila	ator	Ipratropium				Tiotropium		
B. Others:	-tropiu	m	$A I \sim$	Oxyt	ropiu	um				
B. Others.	Select (GIT) -		I1-blocker ne	Pirer	Pirenzepine			Telenzepine		
/ '/\	VVI	10		Meth	OSC	opolamir	ne	Dicycloveri	ine	
II/V	Select	ive M	l3-blocker			rolate		Oxybutinin		
	(Urina			Scop					N-butylbromide	
//	(0111101	. y <b>–</b>	addi,	Dicy				Clidinium	I*	
				Aniso	otrop	oine		Propanthe	line	
* ANTINIC						Harris	- 41-			
A. Nn / Ganglionic Trimetaphan						Hexame	ะเทอ	nium		
Blockers			camylamine			Cuacia	م مامار	lino	I	
		Dek	oolarizing N	IVID		Succiny		1		
B. Nm Blockers						Isoquino (-curium				
D. MIII DIUC	VC12	Nor	n-Depolarizi	ng NN	ΛB			Mivacuri		
						Steroida (-curoni		Pancuro Vecuron		
+ Regenera	ator	Pra	lidoxime			(-curoni	uiii)	v GCUIOII	IMITI	
		1 14								

#### II. AUTACOIDS

	UIAC										
<b>♦</b> H	istam	ines	<b>;</b>	Location			Effect				
		Va	scular S	SM		Dilatio	n				
		Bro	onchi, G	SIT		Contra	ction		Partial Agonist:		
H1	Gq	En	dothelia	al cells		Contra	ction		Histaprodifen Partial Antagonist:		
	•	Se	nsory n	erve endings	3	Itch ar	nd pain	Tripolidine			
		Bra					tory Wakefu				
		Ga	stric Gl	ands (parieta	al cells)						
H2	Gs		st cells	arrae (parrete	<u> </u>		te Histamin				
				tio:		1 101110	no i notarini	0 1(0)	0000		
<b>H3</b>	Gi		e-synap	enteric plexu	c	GIT C	ontraction				
114	<u>C:</u>						T   , , , , , , , , , , , , , , , , , ,				
H4	Gi	VVE	5C: E08	sinophils, Ne		· ·	i-Lympnocy	tes			
						RUGS					
			Histam	ine		etahistir					
Δα	gonist		нз Р	artial Agonis	† ⊢	netit		R-α n	nethyl histamine		
7,	gomst				II	nepip					
			H4	Partial Agon	ist C	lozapine	9				
Ant	agonis	st	Physiol	ogic	Epiner	ohrine			TID		
					1 <sup>st</sup> Ge	n/ Seda	ting/ Class				
			Ethano	lamino	Dipher	nhydram	ine 🗼 🗅	Ca	rbinoxamine		
			Lillallo	iaiiiiie	Dimen	hydrinat	e Q	Do	xylamine		
			Ethylen	ediamine	Pyrilar	nine	3 -	Trij	pelenamine		
			•	10	Hydrox			_	Cyclizine		
			Piperaz	rine	Mecliz		$\sim$		74		
<b>⊔</b> 1 [	Blocke	rc	Alkylan	nine		heniram	nine A	Ch	lorpheniramine		
1111	DIOCKE							OII	Юрисинанню		
			Phenot			thiazine	/ 1/				
			Piperid			heptadir					
				2	27 27		r Less Sed	_			
			Pineridi	ine (true)	Loration				xofenadine		
			Гропа	ine (true)	Deslor	ratidine		Lev	vocetirizine		
			Piperaz	zine (less)	Cetiriz	ine		Acı	rivastatine		
H2 E	Blocke	rs	Cimetic	line	Famot	idine					
-1	tidine		Ranitid	ine	Nizatio	dine					
			Thiope	ramide	I						
H3 k	olocke	rs =		Antagonist	Indonh	nenpropi	t	Tin	rolisant		
	H4			nist / Partial				1112	Tolloant		
* 0						•		ا د نا د ا			
* 3	erotor	1III	пар	oy Hormone:	respor	isible to	r mood regu				
				Effect To inhibit				וע	RUGS		
	5HT <sub>1A</sub>		Gi	further	Partia	al	Buspirone		Repinotan		
	CNS		O.	release	Agoni	ist	Buspirone		rtopinotan		
51	HT <sub>1B/1D</sub>				Full A	gonist	Sumatripta	n	Zolmitriptan		
	cular S		Gi	Constriction	"-tripta	•	Naratriptan		Rizatriptan		
1 43	Jaiai				<u> </u>				<u> </u>		
5	5HT <sub>2A</sub>			0.5 11 11	Agoni		Ergotamine		Methylergometrine  Dibydroorgotoming		
	rine S	М	Gq	Contraction	"Ergo		Ergonovine		<u>Dihydroergotamine</u>		
					Antag	jonist	Methysergi		Ketanserin		
	5HT₃			Emesis	Antag		Granisetro	n	Ondansetron		
	CTZ			LIIICOIO	"-setro	on"	Dolasetron		Palonosetron		
	5HT <sub>4</sub>				Partial						
			Gs	Peristalsis	Agoni	Legaserod			Cisapride		
	GIT					gonist	Prucaloprio	le			
					I MII / 1	gornot	, racatopric				

❖ Melatonin	→ N –acetyl-methoxytryptamine								
	→ Diurnal	cycle (Sleepwake)	MT₁ Sleepiness						
			MT <sub>2</sub> Circadian Rhythym						
	Agonist	Ramelteon		Agomelatone					
Kalidin	→ no ager	→ no agent, but its analogues/ drugs can mimic, block or modulate							
❖ Bradykinin	other autocoids								
* Drauykiiiiii	→function	as an algesic							

PROSTAGLANDINS & EICOSANOIDS									
Prostaglandin									
Vascular Smooth	Constr	Dilation			DRUGS				
Muscle	TXA <sub>2</sub> , PGF <sub>2</sub>		P	GE₁		Alprostad	il (PGE₁)		
IVIUSCIC			Р	$Gl_2$		<b>Epoproste</b>	enol (PGI <sub>2</sub> )		
	Spa	sm	Dila	ation					
Bronchial	TX	_	P	$Gl_2$					
Dionomai	PG	· <del>-</del>		GE					
	LT C	DE <sub>4</sub>	!	<u> </u>					
	Aggreg	gation	Inhi	bitor	•		Δ		
Platelet	TV	Λ -	Р	$Gl_2$			C, J.		
	TXA <sub>2</sub>		P	GE <sub>1</sub>		CT			
GIT	Cytopro	tection			No	Misoprost	ol (DCE.)		
GH	PGE series		-3	A	KI	างแรบคเบรเ	OI (PGE1)		
	Contra	action	Dysme	norr	hea				
Uterine	PG	E <sub>2</sub>	P(	$PGE_2$ $PGF_2$		Dinoprostone (PGE <sub>2</sub> )			
Oterme	PG	$F_2$	P						
- 1	$\sim$ TX	$A_2$	P	GD		VVV			
Even	PG	$F_{2\mathfrak{a}}$		10/	M	Latanopro	ost (PGF <sub>2</sub> )		
Eyes	PG	E /	NA		V	Carbopro	st (PGF2)		
Leukotrienes									
Agonist	LTB4 LT				LTC	4, LTD4			
Antagoniat	Lipooxyg	enase inl	hibitor		Zileu	uton			
Antagonist	Leukotrie	tor inhibi	tors	Mon	telukast	Zafirlukast			
❖ Thromboxane	TXA <sub>2</sub>		V						
❖ Prostacycline	PGI <sub>2</sub> Epoprostenol Treprostinil (Analogue)								

#### III. ANALGESICS

II. ANALGESICS  ❖ COX INHIBITORS									
* COX INFIBITORS	<b>)</b>	NON-SE	ΙF	CTIVE					
	Aspi			g choline salicylate	Salicylsalicylate				
Salicylates	Diflu		_	a salicylate	Methylsalicylate				
D	Pher	Phenylbutazone		ılfinpyrazone	Apazone				
Pyrazol <b>one</b>		henbutazone		pyrone	•				
Dhonylanatic soid	Sulir	ndac	Ald	cofenac	Etodolac				
Phenylacetic acid	Diclo	ofenac	Ke	etorolac	Nabumetone				
Fenamates	Mefe	enamic acid	FΙι	ufenamic acid	Meclofenic acid				
Propionic acid	Ibup	rofen	Flu	ubiprofen					
-pro/-profen	Keto	profen	Na	aproxen					
Indole	Indo	methacin		,					
Pyrole-alkanoic acid	Tolm	etin		1					
Oxicam	Pirox	kicam		1					
Selective COX-2	Melo	loxicam							
Specific COX-2 -cox	ib	Celecoxib	En	nterocoxib	7				
* NON-NARCOTIC	<u>,                                      </u>								
Para-aminophenol	Aceta	minophen/ Par	ace	etamol Pl	nenacetin				
* NARCOTIC			•						
Natural Opium	Morp	hine	1	Codeine	Thebaine				
Comi ovethotio	Heroi	n S	- 1	Hydromorphone	Hydrocodone				
Semi-synthetic	Apon	norphine		Oxymorphone	Oxycodone				
0		adone		Loperamide	Alfentanil				
Synthetic		ridine	_	Tramadol	Sulfentanil				
- TJ		enoxylate	_	Fentanyl	Dofentanil				
			N E	BY DYNAMICS	1				
Strong Agonist		Morphine		Oxymorphone	Hydromorphone				
"Morphine +L"	$\mathcal{A}$	Meperidine		Fentanyl	Levorphanol				
Antagonist		Naloxone		Naltrexone					
"Nal + L"	<u> </u>	Nalorphine		Levalorphan					
Partial Agonist		Pentazocine	Buprenorphine		Codeine				
"PNB"		Butorphanol		Nalbuphine	Hydrocodone				
Mixed agonist-antag	onist	Buprenorphine	9	Nalbuphine					
Miscellaneous	Codeine		Loperamide	Tramadol					

	DRUGS FOR GOUTY ARTHRITIS									
A. Acute Gout	Colchicine	Glucocorticoids:	Methylprednisone							
A. Acule Goul	NSAID									
	Colchicine	Penicillamine								
	Glucocorticoid	Prednisone	Mathylprednisolone							
	Giucocorticola	Triamcinolone								
B. Chronic Gout	Uricosuric Agents	Probenecid	Sulfinpyrazone							
B. Chionic Gout	Xanthine Oxidase Inhibitor	Allopurinol	Febuxostat							
	Urate Oxidase Analog	Pegloticase	Rasburicase							

DRUGS	FOR RHEU	UMATIO	C DISORDERS			
	rin, Tolmetin					
* DMARDS (DISE			NTI-RHEUMATIC	DRUGS)		
1. Non-biologics / Classica	al / Tradition	al				
A. Methotrexate			1			
B. Anti-malarial Agents	Chloroquin		Hydroxychloroqu	iin		
C. Sulfasalazine	Sulfapyridin	е				
D. Immunoquantoquate	Leflunomide	<b>;</b>	Cyclosporine	1		
D. Immunosuppresants and Cytotoxic Drugs	Azathioprine	9	Mycophenolate mofetil			
and Cytotoxic Drugs	Cyclophosp	hamide				
2. Biologics						
TNF α blocking agents	Adalimumak	)	Etanercept	Golimumab		
Tivi a blocking agents	Infiximab		Certolizumab			
IL-1-neutralizing agents	Anakinra					
B-cell depleting agent	Rituximab					
T-cell activation inhibitor	Abatacept					
Anti-IL-6 receptor antibody	Tocilizumab	)		T		
❖ Gold Compounds	Auranofin	oral	Aurothioglucose Aurothiomalate parenteral			
❖ Penicillamine			DMH			
❖ Glucocorticoids		73 P	Tra	d/		

IV. Drugs for COAGULATION Disorder

	ANTITHROMBOTICS									
* Anticoagulan	ts									
A. Direct Thrombi		Hiruc	din /	Lepir	udi	in   ///	M	Bivalirudin		
Inhibitor		Dabi	gatr	an ete	exil	ate mesylate	Э	Argatroban		
B. Indirect Throm	bin	Нера	arin		71	/\/	1	Warfarin		
Inhibitor		Regu	ılar	Unfra	ctic	oned Heparii	n	Dicumarol		
Low Molocular W	oight/	Apixa	abaı	n	F	ondaparinu	X	Danaparoid		
Low Molecular W Fractioned Hepar	_ ~ _	Enox	ара	rin		Tinzaparin		Fraxiparin		
Fractioned nepai	MU	Dalte	par	in	V	raxiparin		Danaparoid		
Antiplatelet										
A. TXA <sub>2</sub> Inhibitors	3			Aspi	rin					
B. ADP Inhibitor	<u> </u>			Clop	ido	grel	Pra	asugrel	Ticlopidin	
C Dhoonhadiaata	rooo Ir	shihita	٠,٢	3 Dipyridamol			5	Sildenafil		
C. Phosphodieste	erase ii	monc	ונ	4 Raftumilast				Cilostazol		
D. Chronrotoin II	h/IIIa Ir	ahihit	oro	Abciximab Ep			Еp	tifibatide		
D. Glycoprotein II	D/IIIa II	IIIIDIU	)18	Tirof	iba	n				
Fibrinolytics/	Throm	boly	tics	(-kina	ase	e, -teplase)				
A. Streptokinase										
B. APSAC		Anis	trep	olase						
C. Tissue Plasmii	nogen	Natu	ıral			Alteplase				
Activator	J	Rec	omk	oinant		Reteplase		Tenecteplas	se	
D. Urokinase										
	, , , , , , , , , , , , , , , , , , ,		PR	OTE	IR	OMBOTIC	CS			
A Vitamia IX Vitami		in K₁		Phy	ton	nenadione		Vitamin K <sub>3</sub>	Menadione	
A. Vitamin K	Vitami	in K <sub>2</sub>				Juinone				
B. Antiplasmin Eps					silon-aminocaproic acid			Tranexami	c acid	
C. Serine Proteas	Ap	rotinir	<u> </u>							

V. Drugs For LIPID Disorder

❖ Statins (↑ Cholesterol)		
A. SHORT-ACTING	Fluvastatin	Pravastatin
A. SHORT-ACTING	Simvastatin	Lovastatin
B. LONG-ACTING	Atorvastatin	Rosuvastatin
❖ Fenofibrates	Gemfibrozil	Clofibrate
(↑ Triglycerides)	Fenofibrate	Bezafibrate
Nicotinic Acid	Vit. B <sub>3</sub> (Niacin)	
<ul><li>NPCILI-Like Transporter Inhibitor</li></ul>	Ezetimibe	
A Dila Asid Dinding Basin	Colestipol	Colesevelam
❖ Bile Acid Binding Resin	Cholestyramin	
<ul><li>Cholesteryl Ester Transfer Protein Inhibitors</li></ul>	Anacetrapib	Dalcetrapib

VI. Cardiovascular drugs

* Diuretics A. Carbonic Anhydrase Inhibitors "-zolamide" B. Osmotic Diuretic B. Osmotic Diuretic C. Loop Diuretics D. Thiazide Diuretic E. Potassium-Sparring Diuretic F. Other Diuretics A. Centrally Acting B. Peripherally-Acting B. Mainted Arteriolar & Venous Dilators B. Mixed Arteriolar & Venous Dilators B. Mixed Arteriolar & Venous Dilators B. Non-Dihydropyridine BASED ON DURATION OF ACTION Intrinsically short-acting Namide Buretanide Buretanide Buretanide Buretanide Buretanide Chlorthale Dickers Buretanide Buretanide Chlorthale Dickers Buretanide Buretanide Chlorthale Dickers Buretanide Buretanide Buretanide Chlorthale Blores Buretanide Chlorthale Dickers Buretanide Chlorthale Dickers Buretanide Buretanide Chlorthale Dickers Buretanide Buretanide Buretanide Chlorthale Blores Buretanide Buretanide Chlorthale Blores Buretanide Chlorthaled Buretanide Chlorthaled Buretanide Chlorthaled Buretanide Chlorthaled Buretanide Buretanide Chlorthaled Buretanide Buretanide Chlorthaled Buretanide Buretanide Chlorthaled Buretanide Buretanide Chlorthaled Buretanide Bu	VI. Cardiovascular dru	ıgs							
A. Carbonic Anhydrase Inhibitors "-zolamide" Brinzolamide Brinzolamide Dichlorphenamide  B. Osmotic Diuretic Mannitol  C. Loop Diuretics Sulfonamide Furosemide Burnetanide  C. Loop Diuretics Elhacrynic acid  Phenoxyacetate Ethacrynic acid  Hydrochlorothiazide Chlorthalidone Metalazone Chlorthiazide Indapamide  E. Potassium-Sparring Diuretic Direct Na-Cl transporter Amiloride Triamterene  ADH Agonist "-pressin" Desmopressin Terlipressin  F. Other Diuretics ADH Antagonist "-vaptan" Demeclocycline Lixivaptan Demeclocycline  **Sympathoplegics**  A. Centrally Acting Reserpine Guanderl Guanethidine  B. Peripherally-Acting Reserpine Guanderl Guanethidine  C. Ganglionic Blockers  D. Alpha Blockers  E. Beta Blockers  B. Arteriolar Vasodilators Hydralazine Minoxidil Diazoxide  B. Mixed Arteriolar & Venous Dilators  **Calcium Channel Blockers  A. Dihydropyridine Guandil Diltiazem  **Simpathoplegics**  **Calcium Channel Blockers  D. Alpha Blockers  B. Mifedipine Amlodipine  Nimodipine Felodipine  B. Non-Dihydropyridine  BASED ON DURATION OF ACTION  Intrinsically short-acting Intrinsically-long acting Modified-Long acting  NonDHP CCBS AL Ecreanidipine  Versant SR		DRUC	S FOR HYP	ERT	ENSIC	N			
Inhibitors "-zolamide"   Brinzolamide   Dichlorphenmide	❖ Diuretics								
B. Osmotic Diuretic Sulfonamide Furosemide Bumetanide C. Loop Diuretics Sulfonamide Furosemide Bumetanide C. Loop Diuretics Fhenoxyacetate Ethacrynic acid D. Thiazide Diuretic Hydrochlorothiazide Chlorthalidone Indapamide E. Potassium-Sparring Diuretic Direct Na-Cl transporter Amiloride Triamterene ADH Agonist "-pressin" Desmoressin Terlipressin F. Other Diuretics ADH Agonist "-vaptan" Convaptan Demeclocycline Lixivaptan Demeclocycline  **Sympathoplegics** A. Centrally Acting Reserpine Guandrel Guanethidine C. Ganglionic Blockers D. Alpha Blockers E. Beta Blockers E. Beta Blockers B. Mixed Arteriolar & Venous Dilators B. Mixed Arteriolar & Venous Dilators  **Calcium Channel Blockers A. Dihydropyridine Guapine Verapamil Dilitazem  **BASED ON DURATION OF ACTION    Trinsically Short-acting Intrinsically-long acting Modified-Long acting NonDHP CCBS except "L,A" Lercanidipine Versant SR	_	Aceta	zolamide	Do	Dorzolamide				
C. Loop Diuretics	Inhibitors "-zolamide"	Brinzo	olamide	Dic	hlorphei	namid	е		
C. Loop Diuretics    Sulfonyurea   Ethacrynic acid   Phenoxyacetate   Ethacrynic acid   Phenoxyacetate   Phe	B. Osmotic Diuretic			- 1	Kin			4/	
Phenoxyacetate		Sulfor	namide	Fur	osemide	Э	В	umetanide	
D. Thiazide Diuretic    Hydrochlorothiazide	C. Loop Diuretics	Sulfor	nyurea	Tor	semide		10		
Chlorthiazide		Phen	oxyacetate	Eth	acrynic	acid	ΛΓ	V	
E. Potassium-Sparring Diuretic Direct Na-CI transporter Amiloride Triamterene  ADH Agonist "-pressin" Desmopressin Terlipressin  ADH Antagonist "-vaptan" Demeclocycline Lixivaptan Demeclocycline  **Sympathoplegics**  A. Centrally Acting Clonidine Guanfacine Methyldopa Guanabenz  B. Peripherally-Acting Reserpine Guanadrel Guanethidine  C. Ganglionic Blockers  D. Alpha Blockers  E. Beta Blockers  **Vasodilators**  A. Arteriolar Vasodilators**  B. Mixed Arteriolar & Venous Dilators**  A. Dihydropyridine "-dipine" Nifedipine Nimodipine Felodipine  B. Non-Dihydropyridine "-dipine" Nifedipine Nimodipine Felodipine  BASED ON DURATION OF ACTION  Intrinsically short-acting Intrinsically-long acting NonDHP CCBS  Aligha Figure Amiloritor Release Plendal ER  Nervaptan Demeclocycline  Triamterene  Triamterene  Triamterene  Terlipressin  Terlipressin  Convaptan Demeclocycline  Lixivaptan Demeclocycline  Convaptan Demeclocycline  Terlipressin  Terlipressi	D. Thiazide Diuretic	-		e Chl	lorthalid	one	M	etalazone	
Diuretic Direct Na-CI transporter Amiloride Triamterene  ADH Agonist "-pressin" Desmopressin Terlipressin  ADH Antagonist "-pressin" Democlocycline  ADH Antagonist "-vaptan" Convaptan Demeclocycline  Lixivaptan Demeclocycline  Convaptan Demeclocycline  Lixivaptan Demeclocycline  Convaptan Demeclocycline  Convaptan Demeclocycline  Lixivaptan Demeclocycline  Convaptan Demeclocycline  Guanadrel Guanatrel Guanatrel Guanatrel Guanethidine  Coganic Hydralazine Minoxidl Diazoxide  Minoxidl Diazoxide  Na nitroprusside Organic Nitrates  Corvaptanic Diazoxide  Convaptan Demeclocycline  Guanatrel  Guanethidine  Guanethidi	D. Illiazide Didietic	Chlor	thiazide	Ind	apamide	)			
F. Other Diuretics  ADH Agonist "-pressin"   Desmopressin   Terlipressin   ADH Androprist   Convaptan   Demeclocycline   Lixivaptan   Lixivaptan    * Sympathoplegics  A. Centrally Acting   Clonidine   Methyldopa   Guanabenz   B. Peripherally-Acting   Reserpine   Guanadrel   Guanethidine   C. Ganglionic Blockers   Guanadrel   Guanethidine   D. Alpha Blockers   Guanadrel   Guanethidine   C. Beta Blockers   Guanadrel   Guanethidine   D. Alpha Blockers   Guanethidine   Diazoxide   D. Alpha Blockers   Diazoxide   Diazoxide   D. Arteriolar Vasodilators   Anitroprusside   Organic Nitrates   D. Anitroprusside   Organic Nitrates   D. Alpha Blockers   Diazoxide   Diazoxide   D. Anitroprusside   Organic Nitrates   D. Anitroprus	E. Potassium-Sparring	Aldos	sterone Antago	onist	Spirino	lacton	е	Epterenone	
F. Other Diuretics  ADH Antagonist "-vaptan"  Convaptan   Demeclocycline   Lixivaptan    Experimental part   Convaptan   Demeclocycline   Lixivaptan    emeclocycline   Lixivaptan   Demeclocycline   Lixivaptan   Demeclocycline   Lixivaptan   Demeclocycline   Lixivaptan   Demeclocycline   Lixivaptan   Demeclocycline   Lixivaptan   Demeclocycline   Demeclocycline   Lixivaptan   Demeclocycline   Devendencine   Demeclocycline   Demeclocycline   Demeclocycline   Deal Call on Demeclocycline   Deal Call on Depart   Demeclocycline   Deal Call on Depart   Demeclocycline   Deal Call on Depart   Depart   Demeclocycline   Deal Call on Depart   Depart   Depar	Diuretic	Direc	t Na-Cl transp	orter	Amilori	de		Triamterene	
**Sympathoplegics  A. Centrally Acting    Clonidine   Guanfacine   Methyldopa   Guanabenz	1 .	ADH	Agonist "-pres	ssin"	Desmo	pressi	in	Terlipressin	
* Sympathoplegics A. Centrally Acting    Clonidine   Guanfacine   Methyldopa   Guanabenz	F. Other Diuretics	Α	DH Antagonis	t	Conva	otan		Demeclocycline	
A. Centrally Acting    Clonidine	$I \setminus A \cap A$		"-vaptan"		Lixivap				
Methyldopa   Guanabenz	Sympathoplegics				·				
B. Peripherally-Acting Reserpine Guanadrel Guanethidine C. Ganglionic Blockers D. Alpha Blockers E. Beta Blockers  **Vasodilators A. Arteriolar Vasodilators Hydralazine Minoxidil Diazoxide B. Mixed Arteriolar & Venous Dilators  **Calcium Channel Blockers A. Dihydropyridine "-dipine"  B. Non-Dihydropyridine  **Vasodilators  **Vasodilators  **Na nitroprusside Organic Nitrates  **Dilators  **Na nitroprusside Organic Nitrates  **Dilators  **Dilators  **Nifedipine Amlodipine Nimodipine Felodipine  **Nimodipine Felodipine  **Dilators  **Dilators  **Nimodipine Felodipine  **Dilators  **Dilators  **Nimodipine Felodipine  **Dilators  **Dilators  **Dilators  **Nimodipine Felodipine  **Dilators  **Dilators  **Non-Dihydropyridine Verapamil Dilators  **Dilators  **Dilators  **Dilators  **Nimodipine Felodipine Pelodipine  **Dilators  **	A. Centrally Acting								
C. Ganglionic Blockers  D. Alpha Blockers  E. Beta Blockers  A. Arteriolar Vasodilators  B. Mixed Arteriolar & Venous Dilators  A. Dihydropyridine "-dipine"  B. Non-Dihydropyridine  B. Non-Dihydropyridine  BASED ON DURATION OF ACTION  Intrinsically short-acting  NonDHP CCBS  All DHP CCBS except "L,A"  Lercanidipine  D. Alpha Blockers  Minoxidil  Diazoxide  Minoxidil  Diazoxide  Organic Nitrates  Organic Nitrates  Diltiazem  BASED ON DURATION OF ACTION  Modified-Long acting  Nondiphe CCBS  Lacidipine  Plendal ER  All DHP CCBS except "L,A"  Lercanidipine  Versant SR			•						
D. Alpha Blockers  E. Beta Blockers  Vasodilators  A. Arteriolar Vasodilators  B. Mixed Arteriolar & Venous Dilators  A. Dihydropyridine "-dipine"  B. Non-Dihydropyridine  Verapamil  B. Non-Dihydropyridine  Verapamil  Diltiazem  BASED ON DURATION OF ACTION  Intrinsically short-acting  NonDHP CCBS  All DHP CCBS except "L,A"  Lercanidipine  Vasodilators  Hydralazine  Minoxidil  Diazoxide  Organic Nitrates  Organic Nitrates  Diazoxide  Amlodipine  Nimodipine  Felodipine  Diltiazem  Modified-Long acting  Plendal ER  Versant SR		Rese	rpine	Guai	iuanadrel Gu			anethidine	
E. Beta Blockers  Vasodilators  A. Arteriolar Vasodilators  B. Mixed Arteriolar & Venous Dilators  Calcium Channel Blockers  A. Dihydropyridine "-dipine"  B. Non-Dihydropyridine  Verapamil  BASED ON DURATION OF ACTION  Intrinsically short-acting  NonDHP CCBS  A. Dihydrop Sexcept "L,A"  Lercanidipine  Versant SR	C. Ganglionic Blockers								
❖ Vasodilators       Hydralazine       Minoxidil       Diazoxide         B. Mixed Arteriolar & Venous Dilators       Na nitroprusside       Organic Nitrates         ❖ Calcium Channel Blockers       Nifedipine       Amlodipine         A. Dihydropyridine "-dipine"       Nifedipine       Felodipine         B. Non-Dihydropyridine       Verapamil       Diltiazem         BASED ON DURATION OF ACTION         Intrinsically short-acting       Intrinsically-long acting       Modified-Long acting         NonDHP CCBS       Lacidipine       Plendal ER         All DHP CCBS except "L,A"       Lercanidipine       Versant SR	D. Alpha Blockers								
A. Arteriolar Vasodilators Hydralazine Minoxidil Diazoxide  B. Mixed Arteriolar & Venous Dilators Na nitroprusside Organic Nitrates  Calcium Channel Blockers  A. Dihydropyridine "-dipine" Nifedipine Amlodipine Felodipine  B. Non-Dihydropyridine Verapamil Diltiazem  BASED ON DURATION OF ACTION  Intrinsically short-acting Intrinsically-long acting Modified-Long acting NonDHP CCBS  All DHP CCBS except "L,A" Lercanidipine Versant SR	E. Beta Blockers								
B. Mixed Arteriolar & Venous Dilators  ** Calcium Channel Blockers  A. Dihydropyridine "-dipine"  B. Non-Dihydropyridine  ** Werapamil  ** Werapamil  ** Diltiazem  ** BASED ON DURATION OF ACTION  ** Intrinsically short-acting  ** NonDHP CCBS  ** All DHP CCBS except "L,A"  ** Lercanidipine  ** Organic Nitrates	❖ Vasodilators	·		1					
Dilators       Na nitroprusside       Organic Nitrates         ❖ Calcium Channel Blockers       Vifedipine       Amlodipine         A. Dihydropyridine "-dipine"       Nimodipine       Felodipine         B. Non-Dihydropyridine       Verapamil       Diltiazem         BASED ON DURATION OF ACTION         Intrinsically short-acting       Intrinsically-long acting       Modified-Long acting         NonDHP CCBS       Lacidipine       Plendal ER         All DHP CCBS except "L,A"       Lercanidipine       Versant SR	A. Arteriolar Vasodilators	3	Hydralazine		Minoxid	il		Diazoxide	
A. Dihydropyridine "-dipine"  B. Non-Dihydropyridine  Werapamil  BASED ON DURATION OF ACTION  Intrinsically short-acting  NonDHP CCBS  All DHP CCBS except "L,A"  Nifedipine  Amlodipine  Felodipine  Diltiazem  Modified-Long acting  Modified-Long acting  Plendal ER  Versant SR		nous	Na nitropruss	side	Organic	Nitrat	tes		
A. Dinydropyridine -dipine  B. Non-Dihydropyridine  BASED ON DURATION OF ACTION  Intrinsically short-acting  NonDHP CCBS  All DHP CCBS except "L,A"    Nimodipine   Felodipine   Diltiazem	❖ Calcium Channel BI	ockers							
B. Non-Dihydropyridine  BASED ON DURATION OF ACTION  Intrinsically short-acting  NonDHP CCBS  All DHP CCBS except "L,A"  Intrinsically-long acting  Lacidipine  Lercanidipine  Pelodipine  Diltiazem  Modified-Long acting  Plendal ER  Versant SR	A Dibydropyridine "-dinine"								
BASED ON DURATION OF ACTION Intrinsically short-acting Intrinsically-long acting Modified-Long acting NonDHP CCBS Lacidipine Plendal ER All DHP CCBS except "L,A" Lercanidipine Versant SR	71. Diriyaropyriamic aipi	•		Felodip	ne				
Intrinsically short-actingIntrinsically-long actingModified-Long actingNonDHP CCBSLacidipinePlendal ERAll DHP CCBS except "L,A"LercanidipineVersant SR									
NonDHP CCBSLacidipinePlendal ERAll DHP CCBS except "L,A"LercanidipineVersant SR						1	:c: - '	Lampastica	
All DHP CCBS except "L,A" Lercanidipine Versant SR		ıg	· · · · · · · · · · · · · · · · · · ·	long	acting				
		Δ"		7					
	7 III DI III OODO OXOOPE L	-,/ \	•	,					

Angiotensin Modifiers			
A Angiotopoin Converting	Sulfhydryl	Captopril	
A. Angiotensin-Converting Enzyme (ACE) Inhibitors	Phosphinyl	Fosinopril	
"-pril"	Carboyyl	Lisinopril	Enalaprilat
-рііі	Carboxyl	Enalaprilat	Perindopril
B. Angiotensin Receptor	Losartan	Valsartan	
Blocker (ARBS) "-sartan"	Candesartan		
C. Renin Inhibitor	Aliskerin		

DRUGS FOR ANGINA PECTORIS									
Nitrovasodilators	❖ Nitrovasodilators								
A. Very Short Acting (	Lasts 5-10mins)	Amyl nitrate							
B. Short Acting (Lasts	10-30mins)	Isosorbide Dir	nitrate	Nitroglycerin SL					
C. Intermediate Acting	g (5-8hrs)	Isosorbide Dir	nitrate PO	Nitroglycerin -SR					
D. Long Acting (5-8hr	s)	Isosorbide Dinitrate -SR		Isosorbide Mononitrate					
❖ Beta Blockers									
* Calcium Channel	Blockers								
A. NON-DHP	Alternative for C	SAP	++ SILDEN	IAFIL					
B. LONG-ACTING	Alternative for C	SAP	* do not tak	ce w/ Nitrates					
C. SHORT-ACTING	For Prinzmetal A	ngina	→ Lethal H	lypotension					

DRUGS FOR HEART FAILURE								
* INOTRODICS	A. Inotropics	Digoxin Digitalis	Digitoxin					
❖ INOTROPICS	B. B <sub>1</sub> Agonist	Dobutamine	Dopamine					
	C. PDEInhibitors	Amrinone	Milrinone					
	A. ACE Inhibitors	1						
	B. Diuretics	Furosemide						
	D. Didietics	Spirinolactone + Eplerenone						
	C. Vasodilators	ISDN + Hydralazine						
UNLOADERS	10 V	Carvedilol	Labetalol					
	D. Betablockers	Bisoprolol	Nebivolol					
		Metoprolol						
	E. Brain Natriuretic Peptide Analogue	Neseritide						

	ANTI-ARRHYTMIC DRUGS									
Clas	S	Effects on AP								
	Α	Prolong	Procainamide	Disopyramide	"Proclamation of the					
I No	A	Prolong	Quinidine		Quin in the Pyramide"					
I. Na Channel	В	Shorten	Tocainide	Mexilitine	"Tomato Lettuce at					
Blockers	Ь	Shorten	Lidocaine	Phenytoin	Mayo Po"					
Diooners	С	No effect	Moracizine	Profenone	"More Fried Please,					
	C	ino effect	Flecainide	Encainide	Enrico"					
II. Beta Blo	ockors	No effect	Propranolol	Acebutolol	Propranolol					
II. Deta Dit	JCKEI S	ino effect	Esmolol	Timolol	Sotalol					
III. K Chan	nol		Amiodarone	Ibutelide	Vernakalant					
Blocker	inei	Prolong	Sotalol	Dofetilide						
Diockei			Bretylium	Dronedarone						
IV. Ca channel blockers		No effect	Verapamil	Diltizaem						
		140 CHECK	VCIapaiiii	DiitiZaciii						
V. Miscellaneous			Adenosine	K ion						
agents	agents		Mg ion							

#### VII. ENDOCRINE DRUGS

Hypothalamic Hormone	Anterior-P.H	Target Organ	Hormone
Thyrotrophin RH (TRH)	Thyrotropin (TSH)	Thyroid Gland	Thyroxine Triiodothyronine T4 & T3
Corticotropin RH (CRH)	Corticotropin/ Adrenocorticotropin (ACTH)	Adrenal Cortex	Cortisol only
Gonadotropin RH (GnRH)/ Lutenising Hormone RH (LHRH)	Gonadotropin = LH & FSH	Ovaries & Testes	Estrogen (FSH), Progesterone (LH), Testosterone (LH)
Growth Hormone RH (GHRH)	Growth Hormone (Somatotropin)	Liver	Somatomedin-C Insulin-like Growth Factor-1 (IGF-1)
Growth Hormone Inhibitory Hormone (GHIH)	Somatostatin	Liver	Somatomedin-C Insulin-like Growth Factor-1 (IGF-1)

H	HYPOTHALAMIC-PITUITARY HORMONE								RMONI	Е	
	❖ Anterior Pituitary Hormone GROWTH HORMONE										
A. GH deficiency		GRO	<b>V V</b> I					ne	Agonist		
	Α.	Cadaveric			mato			110	rigorno	•	0/
I. Growth Hormone	B.	Recombina	nt		matr			Sc	matren	n	1
II. Mecasermin		I In T								M	
III. Growth Hormone Releasing Hormone	Se	ermorelin					)	^	JV		
B. GH excess			* 4-	Grov	wth F	Hor	rmor	ie A	ntagoni	st	
I. Growth Hormone Inhibiting Hormone	So	omatostatin	9	1	V		III. (		recepto nist	Pe	egvisomant
II. Somatostatin	0	creotide	La	anre	otide	)		•	amine		omocriptine
Analogue -reotide	Pa	asireotide	Va	apre	otide	)	Ago	nist		Ca	abergolide
G	ON	NADOTRO	PI	N F	SH	&	LH	and	HCG		
		Gonado		pin	Pre	pai	ratio	n			
I. Mixed LH & FSH		Menotropin							-		
II. FSH		Follitropin α	&	β	Urofollitropir		oin		-		
III. LH <i>U</i>		Lutropin alp	ha								
IV. Human Chronic Gonadotropin		hCG purifie	d II	M	rhC	G	sub(	ב			
Gonad	dotr	opin-releas	ing	j ho	rmo	ne	(Gn	RH)	& Ana	logs	
	A.	Gonadoreli	n								
GnRH Agonist -relin	_	Synthetic alogs		Go	uprol sere	lin		Q.	Nafare	elin	Nasal spray
					trelir				Triptor	elin	IM depot
GnRH Antagonist		nirelix			gare						
-relix	Ce	torelix	or		arelix		orm	0no			
1. Vasopressin		Posteri	Ol.	ritu	itary	П	orm	one			
A. ADH deficiency	ΑГ	ADH Agonist (-pressin) Vasopressin Desmopressin					monressin				
		ADH Antagonist (-var				-					aptan
B. ADH excess		Other Drugs:		vapi	vaptan) Conivar Demecl				1010	αριαπ	
2. Oxytocin											
Oxytocin antagonist		Atosiban									

ADRENOCORTICAL HORMONES								
Zones of Adrenal Co	rtex	Hormone	S					
Zona <b>G</b> lomerulosa		<b>M</b> ineralocorticoid					Go Find Rex,	
Zona Fasciculata		Glucocorticoid				Ma	ke <b>G</b> ood <b>S</b> ex"	
Zona Reticularis		Adrenal <b>S</b> ex Horm	one					
I. Glucocorticoids				Dec	ا د د ا د			
A. Short-Acting To		Cortisol / Hydrocortis	sone		Prednisolone  Methylprednisolone			
Medium (8-12)	_	Cortisone Prednisone		wetr	тугрге	unis	SOIONE	
B. Intermediate				Paramethasone				
(12-36)		Fluprednisolone Triamcinolone		Para	ameun	asu	ne	
				Dov	om oth		NO.	
C. Long-Acting (>36)		Betamethasone		Dex	ameth	asc	one	
II. Mineralocorticoio		A Lala a ta va va a		Dee	210100	t.i		
A. Endogenous		Aldosterone		Des	oxyco	rticc	osterone acetate	
B. Synthetic		Fludrocortisone						
III. Antagonist			1					
Synthetic Inhibitors		Ketoconazole	_	tyrapo			Abiraterone	
	-	Aminoglutethimide	I rii	ostan	e		Mitotane	
Glucocorticoid Receptor Antagonist	ا	Mifepristone		7	r B	C	10	
Mineralocorticoid Receptor Antagonist	;	Spirinolactone	Epl	lerenc	one		, dV	
IV. Sex Hormones		Estrogo	n				++++	
Natural, steroidal	$\bigcirc$	Estroge Estroge	Estriol (E		(E3)   Estropa (E1)		Estrone (E1)	
	$\sim$	\ /	-	Mestranol			, ,	
Synthethic, steroidal		Ethinyl estradiol					Quinestrol	
Synthethic, non stero	idai	Diethylsilbestrol	#	Chlorotrianisene Methallenestril				
Calaatiya Fatra sara		ANTIESTRO						
Selective Estrogen	. 1	/ <del>m</del> ///		Raloxifene Clomiphene				
Receptor Modulator	M	- /1	CIOII	lipriei	ie			
Receptor Antagonist	7—	Fulvestrant				· .		
Aromatase Inhibitor		Anastrozole	Letro	ozole			Exemestane	
Antiprogestin		Mifepristone						
NI (		Progest	<u>in</u>					
Natural	Pro	gesterone						
Synthethic	I			1	<u> </u>		·	
Progesterone deriv		droxyprogesterone a	cetat		ydroxy iproat		gesterone	
		gestrol acetate						
Testosterone deriv	Din	nethisterone						
19 Nor Testosterone		onorgestrel		No	orethy	noc	Irel	
deriv		rethindrone		Ly	neste	rol		
denv	Eth	ynodiol diacetate						
13 Ethyl Nor		rgestimate		De	esoge	stre		
Testosterone deriv	Ge	stodone						
	Androgens							
Testosterone	Nan	drolone						
Methyltestosterone	Mer	notropin						
Danazol								
		ANTIANDRO	GEN	S				
A. 5-Reductase Inhibi	tor	Finasteride				Du	utasteride	
B. Receptor Antagoni		Flutamide	Bio	caluta	mide		irinolactone	
							<del>-</del>	

→ HORMONAL CONTRACEPTIVES							
<b>Combination C</b>	ral Co	ntraceptives	Estrogen + Progesterone				
Monophasic	Cons	tant amount					
Biphasic	D1-D	14; D15-D28	2conc. / pill				
Triphasic		7; D8-D14; D15-D22	3 or more conc. / pill				
Transdermal P	atch	Ethinyl estradiol + P	Progestin				
Vaginal ring		Ethinyl estradiol + E	tonogestrel				
<b>Progestin-only</b>	pills	Ethindrone or Norge	estrel "Minipill"				
Progestin impl	ont	Norimplant 216mg of Norgestrel					
Progestiii iiiipi	anı	Implanon 68mg of Etonogestrel					
Progestine Intrauterine De	vice	Impregnated IUD	Levorgestrel				
Post-coital pills	S	Morning after pills	↑ dose of Progesterone				
Injectable Methoxy progestero			ne acetate				
Fertility Drug		Clomiphene citrate					

DRUGS FOR THYROID DISORDER									
A. TH deficiency	v = Hypothyroidism	HYROID PREPARATIONS							
Synthethic L	evothyroxine (LT4)	Levothyro	onine (LT3) Lic	otrix (T4 & T3)					
Animal Origin			-MA						
B. TH excess =		-1 D	Kir	0/					
Classification	MOA	DITT	<b>△</b> Dr	ugs					
	Inhibiting peroxidase	•	Propylthiouracil	Methimazole					
Thioamide	peroxidation, organific coupling)	cation &	(PTU)	Carbimazole					
Inorganic anions	Inhibit lodine uptake	110	Perchlorate	Thiocyanate					
lodides	<10-14 days	W	Lugol's solution (Strong lodine solution) 5% l <sub>2</sub> KI, H <sub>2</sub> O	Saturated solution of Potassium lodide (SSKI)					
Radiocontrast Dyes	Inhibit peripheral conv & proteolysis	ersion	Iopanate	Ipodate					
Dexamethasone	Inhibit peripheral conv	ersion							
Beta Blocker	Control Hypersymphathetic s/sx + Inhibition of Peripheral Conversion		Propranolol						
Radioactive lodine (I <sub>131</sub> )	Taken up by thyroid of causes destruction & oxidative damage by emission of high energadiation								

PANCREATIC HORMONES								
I. Insulin								
A. Ultra rapid-ac	ting	Insul	in Lispro	)	Insulin Aspart Insulin Glulisine			Glulisine
B. Short-acting		Regu	ılar İnsu	lin				
C. Intermediate-	acting	Isoph	nane Ins	ulin	Lente insuli	n		
D. Long acting		Insul	in Deten	nir	Insuline Gla	argine		
D. Long-acting		Insul	in Lever	nir	Ultra-lente	insulin		
E. Mixed insulin		70-30	O (NPH-	Regula	r/Ultra-rapid	acting)		
E. Mixea insulin		60-40	O (NPH-	Regula	ar)			
II. Insulin Secre	tagogu	es						
	1 <sup>st</sup> Gei		nide"		propamide		nexamic	de
A. Sulfonylurea	1 Gei	ı -aii	liue	Tolbu	tamide	Tolaza	mide	
A. Sullollylulea	2nd Co	n "Ch	/-, Gli-"	Glibe	nclamide	Gliclaz	zide	Glyburide
	2 00		Glipizide		ide	Glime	oiride	
B. Meglinitide	Repag	linide		Nateg	glinide			
III. INSULIN SEN	NSITIZE	ER		•		,		
A. Biguanides		Me	tformin		Phenformin			
B. Thiazolidinedi	one	Ros	siglitazoı	ne	Pioglitazon	Э	Tragl	itazone
IV. ALPHA-GLU	COSID	ASE	Acarbo	se	-	Liragl	utide	
INHIBITOR			Voglibo	ose	RR	Miglito	ol	d /
V. INCRETIN-AC	CTING	DRUG	SS			<u> </u>		7.7.7
A. GLP-1 Analog			or 12.	enatide	Lire	alutida	12	10
(GLUCAGON-LI	1)	enaliu		aglutide	$\Lambda$	V		
B. DPP-IV INHIBITOR				agliptir		agliptin	V	
(DIPEPTIDE PEPTIDASE IV)				xaglipt				
VI. AMYLIN ANALOGUE				amlitid	e			
VII. GLUCAGON	1			III	V			

DRUGS FOR OSTEOPOROSIS								
1. Calcium Carbonate	V /							
2. Biphosphonate "-dronate"	Alendronate Risedronate	Ibandronate Zoledronic acid						
3. SERM	Raloxifene	Zorodromo dola						
4. Calcitonin								
5. Estrogen & Hormonal Therapy								
6. Phystoestrogen								
7. Testosterone & Anabolic Steroids	Oral Methyltestosterone	Testosterone Implants						
8. Parathyroid Hormone	Terparatide							

### **VIII. CNS Drugs**

❖ Psychosis (Schizoprenia)       ↑ Dopamine, ↑5-HT, ↑Glutamate         ANTIPSYCHOTICS / NEUROLEPTICS / MAJOR TRANQUILIZER								
I. First Gen. / Typical / Classical / Traditional								
			mazine"	Chlorprom	azine			
A Dhanathiarina	-	-		Fluphenazine		+Prochlorperazine		
A. Phenothiazine "-azine"	"-azine"   Piperazine "			Perphenazine		+Trifluoroperazine		
				Trifluphena				
	Piperidii	ne "-ri	dazine"	Mesoridazi		Thioridazine		
B. Butyrphenone "-				Haloperido		Droperidol		
C. Thioxantene "-th				Thiothixen				
II. Atypical/Second	d Gen	"-zapi		ne", "-perido	ne"			
Aripripazole			Paliperid			Molindone		
Clozapine Olanzapine			Risperid Ziprasid			Loxapine Ziprasidone		
Quetiapine			Ζιριασια	OTIC		Ziprasiaorie		
❖ Mood Regulation	n 5-	HT N	IE, Dopami	nα				
Bipolar disease			- Major dep			- CT		
Cyclothymia			ania + Dyst		- (	170		
	DR	UGS	FOR MO	OD DISOR	RDER			
A. Antidepressant	S		_					
I. Tricyclic Antidepre	essants		Amitriptyli			imipramine		
-triptiline (Ami,Nor-)		Tr.	Nortriptylii			+ Clomipramine		
-pramine (Desi-,Imi		7 24	Desipramine			osulepine / Dothiepin ortryptyline		
Doxepine	RO		Imipramine Doxepine			otriptyline		
7 1			Mianserin			rotiline		
II. Tetracyclic Antid	epressai	nts	Amoxapine		Ινιαρ	rodinio		
			Phenelzine		Isoc	arboxazid		
III. Non-Selective M	IAO Inhi	oitor	Tranylcyp					
IV. Atypical Antidep -zodone	ressants	3	Trazodone		Nefa	Nefazodone		
V. Selective Seroto	nin		Fluoxetine		Fluv	oxamine		
Reuptake Inhibitor	No.		Sertraline			oxetine		
Flu-Flu, Paro-Ser,C			Citalopran			talopram		
VI. Serotonin-Nore	•	ne	Duloxetine		Des	venlafaxine		
Reuptake Inhibitors		-	Venlafaxir	ne				
VII. Noradrenergic of Serotonin Antidepro (NASSA)		ive	Mirtazepine			"Nasan si Mirta, pampagana pero papatulugin"		
VIII. Noradrenaline Inhibitor (NARI)	Reuptak	се	Reboxetin	ie				
IX. Reversible Inhibitor of MAO <sub>A</sub>		Mocloberr	nide					
X. NE-Dopamine R Inhibitor	euptake		Bupropior	1				
+ Selective Serotor Enhancer SSRE	nin Reup	take	Tianeptine	Э				
B. Anti-Mania / Dru	ugs for l	Bipol	ar Disorde	r				
Lithium			rbamazepir			amotrigine		
Valproic acid				schotic Dru				
When treating:  Dep  Ma			oression nia	Antidep Anti-Ma		+ Anti Mania		

T	nxiety Overstimulation of excitatory neurons									
Types of			zed Anxiety Disord			Stress Syndrome				
Anxiety			e-Compulsive Dis	order	Social Phobia					
Disorder			sorder			_				
	<u> </u>	ANX	KIOLYTIC / MI	NOR 1		,				
		-	Chlordiazepoxide		Chlorazepate	T				
		-	Short Acting MT-z		Midazolam	Triazolam				
1. Benzodia	-		Intermediate-actin	-	Lorazepam	Oxazepam				
-zepam, -:		-	LTO-zepam, A-zo	ıam	Temazepam	Alprazolam				
except		-	Long-acting		The rest	Loronom				
			Without Active Metabolites "COL	۸ "	Clonazepam	Lorazepam				
				A	Oxazepam	Alprazolam				
			Ultra-short acting		Thipental	Methohexital				
		-	"S, sulfur/Thio		Thiamylal	Coopharbital				
			Short-acting 5-6-7 barbital		Pentobarbital Hexobarbita	Secobarbital				
2. Barbitura		-	Intermediate-actin	) CI	TIEXUDATUILA					
-barbital,	-bital,		Amo-buta, interme	•	Amobarbital	Bitabarbital				
-tal			hypnotic	odiato,	7 timobarbitar	Bitabarbitai				
		-	Long-acting			15				
				May Forever kay Pheno		Barbital				
			& Barbi			41				
3. Buspirone			-	Fro	22	1. //				
4. Other Anx		S	Zolpidem, Zaltreo	nam						
5. TCA's	.0.70			1	$\Delta I dI$	M ·				
0. 10/13		0	00-		11 11/1/	V .				
	B	Tre	Abnormal electric			ng neurons				
Seizure			$\sqrt{\text{Inhibitory NT}} = \sqrt{\frac{1}{2}}$							
13				hhibitory NT NE, Epi, Dopa, Glutamate, Aspartate						
					Excitatory NT Glycine, GABA					
		SEIZURES W/ DOCs & ALTERNATIVES								
			/ / / /	Cs & A						
7.1.	ypes	of S	eizure	Cs & A		Alternative				
1. Partial / Fo					DOC	Alternative Lamotrigine				
		of So			DOC mazepine	Alternative Lamotrigine Oxacarbazepine				
1. Partial / Fo		of Sim Sim Con	ple nplex	Carba	DOC mazepine rtoin	Alternative Lamotrigine Oxacarbazepine Valproic acid				
1. Partial / Fo		of Som Sim Con Gen	ple nplex neralized Tonic-	Carba Pheny	DOC mazepine /toin	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate				
1. Partial / Fo		of Som Sim Con Gen Clor	ple nplex neralized Tonic- nic (Grandmal)	Carba Pheny Valpro	DOC mazepine rtoin  pic acid	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine				
1. Partial / Fo	ocal	of Som Sim Con Gen Clor	ple nplex neralized Tonic-	Carba Pheny Valpro	DOC mazepine rtoin  pic acid uximide	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid				
1. Partial / Fo	ocal	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal)	Carba Pheny Valpro Ethosi	DOC mazepine rtoin  pic acid uximide	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid				
1. Partial / Fo	ocal	of Som Sim Con Gen Clor	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal)	Carba Pheny Valpro Ethosi	DOC mazepine rtoin  pic acid uximide  zepam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate				
1. Partial / Fo	ocal	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal)	Carba Pheny Valpro Ethosi	DOC mazepine rtoin  pic acid uximide  zepam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid				
1. Partial / For Seizure  2. Generalize	ocal	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal)	Carba Pheny Valpro Ethosi Clona	DOC mazepine rtoin  pic acid  uximide  zepam  pic acid	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate				
1. Partial / For Seizure  2. Generalize  3. Status	ocal	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal)	Carba Pheny Valpro Ethosi Clona Valpro Loraze	DOC mazepine rtoin  Dic acid uximide  zepam  Dic acid epam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate				
Partial / For Seizure  2. Generalize  3. Status Epilepticus	ocal	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal)	Carba Pheny Valpro Ethosi Clona Valpro Loraze Clona	DOC mazepine rtoin  Dic acid uximide  zepam  Dic acid epam zepam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate				
1. Partial / For Seizure  2. Generalize  3. Status	ocal	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic	Carba Pheny Valpro Ethosi Clona Valpro Loraze Clona	DOC mazepine rtoin  pic acid uximide  zepam pic acid epam zepam pam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine				
1. Partial / For Seizure  2. Generalize  3. Status Epilepticus  4. Acute	ed	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic oclonic ANTI-C	Carba Pheny Valpro Ethose Clona: Valpro Loraze Clona: Diaze	DOC mazepine rtoin  pic acid uximide  zepam pic acid epam zepam pam pam pam pam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine Lamotrigine				
1. Partial / For Seizure  2. Generalize  3. Status Epilepticus  4. Acute  1. Cyclic Ure	ed	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic	Carba Pheny Valpro Ethose Clona: Valpro Loraze Clona: Diaze	DOC mazepine rtoin  pic acid uximide  zepam pic acid epam zepam pam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine				
1. Partial / For Seizure  2. Generalize  3. Status Epilepticus  4. Acute	ed	of Sim Con Gen Clor Abs	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic oclonic ANTI-C	Carba Pheny Valpro Ethose Clona: Valpro Loraze Clona: Diaze	DOC mazepine rtoin  pic acid uximide  zepam pic acid epam zepam pam pam pam pam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine Lamotrigine				
1. Partial / For Seizure  2. Generalize  3. Status Epilepticus  4. Acute  1. Cyclic Ure	ed	of Sim Con Gen Clor Abs Ator	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic nic nic Phenytoin	Carba Pheny Valpro Ethose Clona: Ualpro Loraze Clona: Diaze Ph	DOC mazepine rtoin  pic acid uximide  zepam pic acid epam zepam pam pam pam pam	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine Lamotrigine				
1. Partial / For Seizure  2. Generalize  3. Status Epilepticus  4. Acute  1. Cyclic Ure 2. Tricyclics	ed	of Sim Con Gen Clor Abs Ator	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic clonic ANTI-C Phenytoin Carbamazepine	Carba Pheny Valpro Ethose Clona: Valpro Loraze Clona: Diaze Ph	DOC mazepine rtoin  pic acid uximide  zepam pic acid epam zepam pam pam ULSANT nenobarbital	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine  ++++ Ethosuximide				
1. Partial / For Seizure  2. Generalize  3. Status Epilepticus  4. Acute  1. Cyclic Ure  2. Tricyclics  3. Benzodiaz	ed	of Sim Con Gen Clor Abs Ator	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic clonic ANTI-C Phenytoin Carbamazepine Diazepam Gabapentin	Carba Pheny Valpro Ethose Clona: Valpro Loraze Clona: Diaze Ph	mazepine rtoin  pic acid  uximide  zepam  pic acid epam zepam pam  LSANT nenobarbital  razepam egabalin	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine  ++++ Ethosuximide  Clonazepam Vigabatin				
1. Partial / For Seizure  2. Generalize  3. Status Epilepticus  4. Acute  1. Cyclic Ure  2. Tricyclics  3. Benzodiaz	ed	of Sim Con Gen Clor Abs Ator	ple nplex neralized Tonic- nic (Grandmal) ence (Petitmal) nic clonic ANTI-Co Phenytoin Carbamazepine Diazepam	Carba Pheny Valpro Ethose Clona: Valpro Loraze Clona: Diaze Ph	mazepine rtoin  pic acid  uximide  zepam  pic acid epam zepam pam  LSANT nenobarbital	Alternative Lamotrigine Oxacarbazepine Valproic acid Topiramate Lamotrigine Valproic acid Valproic acid Topiramate Lamotrigine  ++++ Ethosuximide  Clonazepam				

❖ Parkinson's Dse							
	ANTIPA	RKINSONISM					
1. Levodopa + Carbidopa							
2. COMT Inhibitors	Entacapo	one	Tolcapone	Tolcapone			
Ideal Triple Theory	Levodopa	a + Carbidopa + E	Entacapone				
		Bromocriptine		Pramipexole			
3. D <sub>2</sub> agonist	Ergot	Cabergolide	Non-Ergot	Rupinirole			
		Pergolide					
4. Selective MAO <sub>B</sub> Inhibitors	Selegiline		Rasegiline				
5. Amantadine							
6. Apomorphine							
7. Anticholinergic agents	Biperiden		Trihexyphenidyl				
7. Anticholinergic agents	Benztropine						
DRUGS FOR	OTHER	MOVEMENT	DISORDE	R			
Huntington's Disease	Tetraben	azine	Haloperidol				
Trumington's Disease	Reserpin	Reserpine					
Tourette's Syndrome	Clonidine		Haloperidol	. 17			

## IX. ANESTHETHICS

<b>D</b>			71	
I Analgesia		JH/\	Anesthesia	
II Excitat	ory/Delirium	IV   Medullary Depression		
<b>♦</b> Ge	eneral Anesthesi	ia		
ethics				
4 15 TT -	Isoflurane	M	Methoxyflurane	
O	Enflurane	N	Nitrous Oxide	
Н	Halothane	V		
2. Intravenous Anesthethic				
cting BB Thiopental Methiohexital		Thiamylal		
Midazolam	V V V	Triazolam		
Morphine	Sulfentanil	Fentanyl		
Succinylchol	ine			
Combined Thorany Droperidol + Fentanyl		Neurolept analgesia		
Combined Therapy Droperidol + Fentanyl + NO <sub>2</sub>		Neurolept anesthesia		
♦ L	ocal Anesthesia	l		
Ester type "i" Cocaine, Procaine Amide			"ii" Lidocaine, Prilocaine	
	I Analge II Excitate  Gethics  I E  H  ethic  Thiopental  Midazolam  Morphine  Succinylchol  Droperidol +  Droperidol +  ** L	I Analgesia II Excitatory/Delirium  General Anesthesia ethics  I Isoflurane E Enflurane H Halothane ethic Thiopental Methiohexital Midazolam  Morphine Sulfentanil Succinylcholine Droperidol + Fentanyl Droperidol + Fentanyl + NO2 Local Anesthesia	I Analgesia II Excitatory/Delirium	

DRUGS OF ABUSE					
I. CNS Stimulant					
A. Xanthine	Caffeine	Theobromine			
A. Adriumie	Theophylline				
B. Nicotine	Nicotine Polacrilex gum	Bupropion			
b. Nicotine	Clonidine	Vareniclenin			
	Methylphenidate	Phentermine			
C. Amphetamine	Methamphetamine	Bangkok Pills			
	Ecstacy				
D. Cocaine					
II CNS Donrossant	Ethanol/ Ethyl alcohol	Opioids (Heroin, Morphine)			
II. CNS Depressant	Benzodiazepine				
III. Hallucinogens	Phencyclidine	Marijuana			
пі. папистодень	Lysegic acid Diethylamide				

DRUGS USE TO TREAT DEPENDENCE & ADDICTION			
Opioid Antagonist	Naloxone, Naltrexone		
Synthetic Opioid	Methadone		
Partial-receptor agonist	Buprenorphine		
N-receptor partial agonist	Varenicline		
Benzodiazepine	Oxazepam, Lorazepam		
NMDA receptor antagonist	Acamprosate		
Cannabinoid receptor agonist	Rimonabant		

### X. RESPIRATORY DISORDERS

Drugs for Colds											
A Common C	A. Common Colds										
	asal Decongestants A <sub>1</sub> agonist			ist	Phenylephrine						
Nasay Spray		7 ti agon		ТПОПУЮРТП							
B. Allergic Colds Antihistamine w/ Nasal Decon					gestant						
Drugs for Cough											
A. Mucoregulators			Ambrox		Bromhe	xin	e Ca	rhoc	cisteine		
B. Mucolytic	41010		N-acetyl			XIII	0 00	1000	olotonio e		
C. Expectoran	.+		,		Glycerol guia	col	oto)	. 0	7		
·	L		Guiaien	esiii (	Glycerol gula	COI	ale)	1	,		
D. Antitussive	ina	Lovo	dropropizio	20		T	A				
Peripheral-act	ing		dropropizii		- 1 D Y	7			del		
Centrally-actin	ıq		narcotic		amirate citrat	-		-	1.0		
, , ,		Narco	otic	Cod	deine De	xtr	omethorpha	an	Noscapine		
Drugs For Bronchospastic Disorders											
A. BRONCHODILATORS											
_	13	7		BA	110	M		LAI			
1. B <sub>2</sub> Agonist			ol/ Albuter		etoproterenol		Salmeterol		Bambuterol		
3-	Ter	tbutaliı	ne	Pi	coterol	Formotero		ndacaterol			
B. METHYLXA	ANTH	HINE	Theop	Theophylline Aminophylline							
C. ANTICHOL	INE	RGICS	ANTIMU:	SCAR	RINIC						
Short-acting	Ipra	atropiu	m		()						
		tropiun			nium						
II. MAST CEL	L ST	ABILI									
Nedocromil		<u> </u>			n Sodium / Na	a C	romoglyca	te			
III. ANTI-INFL				TS							
A. LEUKOTRIENE MODIFIERS											
Lipooxygenase Inhibitor Zilueton											
LTD <sub>4</sub> Recepto				lontel	ukast		Zafirlukas	ST			
B. GLUCOCO	KIIC			40	Elutionen		Triomaina	olon:	2		
Inhaled			Budesonio Prednison			Fluticasone			Triamcinolone		
Systemic Oral						Prednisolone Methylprednisolone  Methylprednisolone					
Systemic Pare	HILE	eral Hydrocortisone I			IV	Methylpresnisolone IV					

#### XI. DRUGS FOR GI DISORDER

AL DRUGS FUR	AL DRUGS FOR GI DISORDER						
G	GASTROESOPHAGEAL REFLUX DISEASE						
Mild cases	• Life	style modification					
IVIIIU Cases	• Ove	ver the counter antisecretory agents					
		H2 blockers		Cimetidine		Famotidine	
Moderate To Seve	re	TIZ DIOCKCIS		Ranitidine		Nizatidine	
Cases	Drot	on pump inhibitors		Omeprazole	9	Pantoprazole	
	FIOL	on pump inimibitors	<b>'</b>	Lansoprazo	le	Rabeprazole	
PEPTIC	ULCER	DISEASE AND F	RE	LATED CON	NDI'	TIONS	
	AIOH + M	0		NaHCO <sub>3</sub> + C	aCO	3 + Na alginate	
1. Antacid	AIOH + N	IgOH + Dimethicone	)	NaHCO <sub>3</sub>			
/	AIOH + M	IgOH + Simethicone	!				
2. H <sub>2</sub> Receptor Antagonist							
2. Dunatan Dunan In	. la :la :4 a #	Omeprazole	E	Esomeprazole F		peprazole	
3. Proton Pump Ir	Inibitor	Lansoprazole	Pa	antoprazole			
4. Prostaglandin		Misoprostol			•		
5. Mucosal Protect	ctant	Sucralfate	C	olloidal Bismu	th Su	ıbcitrate	
	Triple Drug Therapy vs. <i>H.pylori</i>						
<ul> <li>Omeprazole + 0</li> </ul>	Clarithron	nycin + Metronidazol	e/A	Amoxicillin	, -		
<ul> <li>Bismuth subsali</li> </ul>	Bismuth subsalicylated + Metronidazole + Tetracycline						
<ul> <li>Ranitidine/Bism</li> </ul>	uth subc	itrate + tetracycline +	- C	larithromycin -	- Me	tronidazole	
	Qua	druple Drug Thera	ЭΥ	vs. H.pylori	В.	1	
Omeprazole + E		subsalicylate + Metro	- 400		cyclir	ne	

DRUGS FOR DIARRHEA				
1. Oral Rehydration Salts / Oral Glucose- Electrolyte Solution				
ALL	Diphenoxylate	Opium Tincture		
2. Antimotility Agents	Loperamide	Difenoxin		
	Paregoric			
3. Adsorbents	Kaolin-Pectin Tincture	Attapulgite		
3. Ausorbeitts	Polycarbophil			
4 Anticoprotory	Bismuth subsalicylate	Bacterial Replacement		
4. Antisecretory Enzymes Enzymes				
5. Ocreotide	,	•		

DRUGS FOR CONSTIPATION					
1 Pulk Forming Lovative	Fibers (fruits, vegetables)	Psyllium			
Bulk-Forming Laxative	Bran Methyl Cellulose				
	Lactulose	Mg OH/Citrate/SO <sub>4</sub>			
2. Osmotic / Saline Laxative	Sorbitol	Glycerin			
	Na PO <sub>4</sub>				
	Bisacodyl	Sennoside			
3. Stimulant / Irritant Laxative	Phenolphthalein	Casanthrol			
3. Stimulant / Irritant Laxative	Phenolphthalein Cascara Sagrada	Casanthrol Castor oil			
<ul><li>3. Stimulant / Irritant Laxative</li><li>4. Stool Softener / Emollient</li></ul>		Castor oil			
	Cascara Sagrada				

DRU	DRUGS FOR VOMITING					
1. Dopamine Antagonist	Prochlorperazine Chlorpromazine	Promethazine Metoclopramide				
2. Selective Serotonin Receptor Inhibitor	Ondansetron Granisetron	Dolasetron Palonosetron				
3. Antihistamine-Anticholinergic Agents	Dimenhydrinate Diphenhydramine	Dimenhydrinate Diphenhydramine				
4. Cannabinoids	Marijuana Nabilone	Dronabinol				
5. Corticosteroid	Dexamethasone					
6. Benzodiazepine	Lorazepam					
7. Substance P/ Neurokinin 1 Receptor Antagonist	Aprepitant	,				
8. Pyridoxime						

INFLAMMATORY BOWEL DISEASE					
1. 5-aminosalicylate	3. Biological agents (TNF α inhibitor)				
2. Glucocorticoids	Adalimumab Infliximab				

#### X. CHEMOTHERAPEUTIC DRUGS

A. CHEMOTHEI	AI LUI			DDI	00				
1 0)/5050)/10 10		ONCO	JIIC	DRU	GS				
I. CYTOTOXIC AG	ENTS	A D: 4			4.				
		A. Direct	DNA	Intera	ctin	g			
Akylating Age     Akylating Age		T T							
1. Merchlorethamine									
2. Cyclophospham	1	Ifosfamio	de						
3. Platinum Analog	· · · · · · · · · · · · · · · · · · ·	Cisplatin			Oxi	platin	C	Carboplatin	
4. Nitrosureas -mu	stine	Lamustir	ne		Car	mustine			
5. Procarbazine	I	Dacarba	zine						
6. Busulfan	I								
7. Chlorambucil	1								
<ul> <li>Topoisomera</li> </ul>	se Inhibito	ors							
1. Antibiotics antino	eoplastic -	mycin	Dact	inomyc	cin	Bleomycin		Mitomycin	
2 Anthrocycling de	orivotivo r	ubicin	Dau	norubic	in	Idarubicin			
2. Anthracycline de	-IIValive -II	Doxorul		orubicir	1	Epirubicin	Epirubicin		
3. Podophyllotoxin	3. Podophyllotoxin derivative -pos			Etoposide		Tenoposide			
4. Camptothecin -t	ecan		Irino	Irinotecan		Topotecan			
	ı	B. Indirec	t DN	<b>A-Inter</b>	actir	ng			
<ul> <li>Antimetabolit</li> </ul>	tes								
1. Methotrexate			DHP						
2. Antipyrimidine/ F									
3. Antipurine/ Purir	ne Analogu	ne e	6-1	/lercapt	topui	rine	6-T	hioguanine	
Antimitotic									
1. Taxanes -taxel	Paclitax	cel	Ca	bazitax	el	Do	ceta	axel	
2. Vinca alkaloids	Vincristi	ine	Vin	Vinblastine					
II. HORMONES AI	ND ANTA	GONIST							
Adrenocortical ster	oid	$I \wedge V$	V	V					
For ER (+)	Tamoxife	fen							
cancer	Aromatas	se Inhibitor Anastra		nastraz	ole	Exemestar	ie	Letrozole	
Prostate cancer   Androgen receptor		•	4	utamide	e Bicalutamide				
antagonist –tamide									
III. WISCELLANE	III. MISCELLANEOUS AGENT Hydroxyurea								
Targeted theres:	1. Bevaci			3nib Sorafenib			Sunitinib		
Targeted therapy	2. Cetuxi	IIIau				N			
75					Erlotinib			Gefitinib	

ANTIBIOTICS  I. Cell Wall Synthesis Inhibitors										
A. Penicillins										
Natural Penicillins	Pen	G Be	enzylpenicil	lin Pen V Phenoxymethylpenicillin					penicillin	
Beta-Lactamase	Meth	nicilli	ns		Nafcillin					
resistant	Clox	acilli	n	TACIONITI						
				Am	npicillin	)				
	Amiı	nope	enicillin	Am	noxicilli	in +	- Sulb	acta	ım	
				Ba	Bacampicillin + Clavulanic acid					acid
Extended	Cark	. O V V	nonioillin	Tic	arcillin			Tol	رم <u>C</u> م	ro of your Carba
spectrum	Cark	ОХУ	penicillin	Ca	rbenic	illin		ıaı	NE Ca	re of your Carbs
penicillin				Me	zlocilli	n				
	Urei	dop	enicillin	Az	locillin			MA	P of L	Jkreine
		_		Pip	eracill	in				
B. Cephalosporins			E	ксер	ot				C	Coverage
1 <sup>st</sup> Gen "Ceph-"		Ce	fadroxil		efazolir	n				aph, Streph
2 <sup>nd</sup> Gen "Cef-vowel	"		fmetazole	Lo	oracarb	ef			CAF	P, G(+), G(-)
Z GCH GCI VOWCI			fprozil							2.7
3 <sup>rd</sup> Gen "Cef-conso	nant"		fixime	Mo	oxalac	tan	1	n (	C	ross BBB
	Cefotaxime		rotaxime			12	M	Dogudomores MDCA		
4 <sup>th</sup> Gen "pi"		Cefepime		Cefpirome			Pseudomonas, MRSA, Enterobacter			
5 <sup>th</sup> Gen "ro"		Ceftaroline		Ceftibiprole			Р		omonas, MRSA	
C. Other Beta Lacta	am	77	MA		1 /	1		d	1//	V
Monobactam	a ()	Azt	reonam				Λ	N	V	. <del></del>
Carbapenem	7	Doripenem					Merc	_		
TIL.		Imipenem + Cil		1 / 1 1		Erta				
Glycopeptide antibi		Vancomycin		W	Bac		Baci	traci	n	
II. Protein Synthes			~	1-						
1. Tetracycline					Tigercycline Demeclocycline					
O Areiro el vescido	IVIII	ЮСу	Cime	De	emecic	Cyc	Jille			
2. Aminoglycoside Streptomyces "-my	oin"		Ctroptomyo	in	Tohro	m	oin.			Zanamyoin
Micromonospora "-			Streptomyc Amikacin	111	n Tobramycin Netilmicin			Kanamycin Gentamicin		
$\sim$ $\pi$										
3. Macrolide		uIIO	mycin		Clarithr				AZI	thromycin
4. Chloramphenico	I				Street			n-		
5. Lincosamide	up the c	oic I	nhihitara	/	7. Strep	טנס	yramı	IIIS		
III. Nucleic Acid Synthesis Inhibitors										
Trimetophrim	Sulfonamide Co-t		noxazole							
Питогорини	1 <sup>st</sup> C	Gen	Nalidix	ic a	cid				1	
	2 <sup>nd</sup> (		Ciprofl				Oflo	xaci	n	Enoxacin
	CLC		Lomefl				Norfl			
Quinolones	3 <sup>r</sup>	d	Loveti	0.40	oin				nin	Charfloyasia
	LeC	GS	Levofl	uxa	UIII		Gatifloxacin		ווונ	Sparfloxacin
	<b>4</b> <sup>t</sup>		Trovaf	lova	cin	Moxifloxacin		cin		
	TI	/I ITOVATIO		UXACIII IVIC		IVIUAIIIUXAUIII		OIII		

	ANTI-TB & LEPROSY DRUGS								
	1 <sup>st</sup> line	Rifampicin	Ethambutol						
	RIPES	Isoniazid	Streptomycin						
Anti-TB	KIFLO	Pyrazinamide							
Allu-i D	2 <sup>nd</sup> line	Flouroquinolones	Linezolid						
	FACLR	Aminoglycosides	Rifabutin						
		Cycloserine							
	Tuberculoid	Dapsone	6 mos.						
Anti-Leprosy	Tuberculoid	Rifampicin	o mos.						
		Rifampicin							
	Lepromatous	Dapsone	24 mos.						
		Clofazamine							

ANTIFUNGAL								
1. Polyenes	Amphotericin B							
	Imidazole	Ketoconazole		Miconazole	Cotrimoxazole			
2. Azoles	Triazole	Fluconazole		Itraco	nazole			
	THAZUIE	Pos	saconazole	Variconazole				
3. Terbinafines					51			
4. Echinocandins	Caspofung	nin	Micafung	nin Oni	dulafungin			
"-fungin"	Casporung	yıı ı	Micarding	JIII OIII	dularungin			
5. Flucytosine			TIAI		d/			
6. Griseofulvin			DITT	A				

	ANTIVIRAL DRUGS								
I. Respiratory	Oseltamivir	Amantadine	Ribavirin						
i. Respiratory	Zanamivir	Rimantadine							
II. Hepatic Interferon Alpha		Lamivudine	Adefovir						
III Harnes and CMV	Acyclovir	Ganciclovir	Cidofovir						
III. Herpes and CMV	Foscarnet	Trifluridine							
A	Nucleotide Reverse	Zidovudine AZT	Lamivudine 3TC						
	Transcriptase	Stavudine d4T	Emtricitabine FTC						
1 1/\ //\/\(\)	Inhibitors (NRTIs)	Didanosine ddl	Abacavir ABC						
1 / \/° \		Tenofovir TDF							
\ / / Y	Non-nucleoside	Nevirapine NVP	Etravirine ETR						
	reverse transcriptase	Delavirdine DLV	Rilpivirine RPV						
N/ 11N/	Inhibitors (NNRTI)	Efavirenz EFV							
IV. HIV		Ritonavir RTV	Nelfinavir NFV						
	Protease Inhibitors	Saquinavir SQV	Fosamprenavir FPV						
		Indinavir IDV							
	Entry Inhibitors	Enfuvirtide	Maraviroe						
	Integrase Inhibitors	Raltegravir	Dolutegravir						
	integrase inilibitors	Elvigravir							

ANTIPROTOZOAL							
Drugs for:							
	A. Mixed Amebicide	Metronidazo	le	Tinidazole			
A. Amebiasis	B. Luminal Amebicide	lodoquinol		Paromycin			
	C. Systemic Amebicide	Chloroquine	Э	Dehydroemetine			
	Primaquine	Chloroquine	Atovaquine-proguanil				
B. Malaria	Mefloquine	Quinine	Artemisin				
	Pyrimethamine						
	Albendazole	Mebendazole		Thiabendazole			
C. Anthelmintics:	Diethylcarbamazine	Ivermectin	Metrifonate				
	Niclosamiide	Piperazine	Praziquantel				
	Pyrantel Pamoate						

Paclitaxel	Ovarian & Advanced Breast	Peklitaxel "pekpek" =	
	Cancer	ovarian	
Docetaxel	Advances Breast Cancer	Docetaxel pang dodo	
Etoposide	Monocytic leukemia, testicular		
Liopodiao	cancer, Lung cancer		
Teniposide	Lymphoma	18,1	
Topotecan	Metastatic ovarian cancer and	Topovary	
ropotodan	Cisplatin-resistant neoplasm	Toporary	
Irinotecan	Colon & Rectal Cancer	Iri sa pwet	
Doxorubicin	Breast, ovarian, thyroid, lung	Doxo for dodo rin	
DOXOIUDICIII	cancer & acute leukemia	DOXO TOT GOGO TITT	
Daunorubicin &	Acute Leukemia	Down Low, Daun leu	
Idarubicin		Down Low, Daum leu	
Dactinomycin	Pediatric Sarcoma; Wilm's	Dac=duckling=pediatric	
Dactinornycin	Tumor	Dac=ducking=pediatric	
I L	Testicular cancer, reverse		
Plicamycin	cancer-associated		
	hypercalcemia		
Mitomyoin	2 <sup>nd</sup> ine agent for metastatic		
Mitomycin	colon cancer		
Bleomycin	Neck, Cervical carcinoma		
Chlorambucil	Chronic Lymphocytic Leukemia		
Mercaptopurine	Childhood Acute Leukemia	MerCALtopurine	

	BCS CLASSIFICATION								
Class	Solubility	Permeability		DRUGS					
I	<b>^</b>	<b>^</b>	DVMP	Diltiazem, Verapamil, Metoprolol, Propranolol					
II	<b>V</b>	<b>^</b>	Pheny- BINGED	Phenytoin, Bicalutamide, Ibuprofen, NSAID, Glibenclamide, Ezetamibe, DHP Ca Channel Blockers					
III	<b>^</b>	<b>+</b>	Neo-CARE	Neomycin B, Cimetidine, Atenolol, Ranitidine, Enalaprilat					
IV	<b>V</b>	<b>→</b>	Furo-HBC	Furosemide, Hydroclorothiazide, Bifonazole, Cefuroxime					

## **TOXICOLOGY**

	TOMICOLOGI							
	(ICANTS AFFECT SYSTEMIC		TERATOGENIC AGENTS					
M	Methanol, Metabolic acidosis	Thalidomide	Phocome	elia/Amelia				
U	Uremia	Warfarin	c nose					
D	Diabetic Ketoacidosis	Tetracycline	Teeth dis	coloration				
P	Paraldehyde	Lithium	Ebstein a	nomaly				
- 1	Iron, Isoniazid	ACEi	Renal dys					
L	Lactic acidosis	DES	CC CA fo	or cervix & vagina				
Е	Ethylene glycol	Methimazole	Aplasia c					
S	Salicylates	Carbamazepine	Neural tu	be defect				
	ANS	Valproic acid	Spina bifi					
	Parasymphatomimetics:	Phenytoin	Fetal Hyd	lantoin syndrome				
	Organophosphates	Alcohol	Fetal Alco	ohol syndrome				
D	Diarrhea	ANTIDO		TES				
U	Urination	Anticholinergics		Neostigmine				
M	Miosis, muscle fasciculation	Cholinesterase Inhibitors		Atropine				
В	Bronchoconstriction,	Organophosphat	es	Pralidoxime				
Ь	Bradycardia	BZD or Zolpidem	Flumazenil					
Ε	Emesis	Carbon Monoxide	Oxygen					
L	Lacrimation	Cyanide	Hydroxycobalamin					
S	Salivation, Sweating	Digoxin	Digoxin antibodies					
	Symphatomimetics:	Flouride, CCBS		Calcium				
	Amphetamine	Warfarin	Vit.K					
M	Mydriasis	Heparin		Protamine sulfate				
Α	Agitation	Iron		Deferoxamine				
Т	Tachycardia	Hypoglycemics		Glucose				
Н	Hypertension	Beta-blockers	1/00	Glucagon				
S	Seizure, sweating	Paracetamol	V	N-acetylcysteine				
A	Ti -	Methanol/ Ethyle	ne glycol	Ethanol/Fomepizole				
1	1107	Opioids	Naloxone					

	GENERAL MANAGEMENT OF POISOINED PX								
	INITIAL ASSESMENT / PRIMARY					SECONDARY SURVEY			
Α	Airway			٧	M	Medications			
В	Breathing				Α	Allergy			
C	Circulation				P	Past Medical History/ Pregnancy			
	Degree of	<b>Glasg</b> (15)	ow coma sca	ale	L	Last meal			
D	disability	Eye opening Verbal response		4 5	Ε	Events/ Environment related to injury			
		Motor response 6				HEMODIALYSIS INDICATION			
		S	Substance		Α	Acidosis (Severe)			
Е	Evposuro	Α	Amount		Е	Electrolytes			
_	Exposure	Т	Time		_	(Refractory hyperkalemia)			
		S	Symptoms			Intoxication			
	NICOTINIC	STIMU	ILATION		1	(Salicylates, Lithium, Methanol,			
M	M Muscle weakness					Ethylene Glycol)			
Α	Adrenal Medu	ılla			0	Overlad volume			
T	T Tachycardia					Uremia			
C	Cramps				U	(Encephalopathy, Bleeding)			
Н	Hypertension			•	1	(Encephalopathy, bleeding)			