

# NEED TO KNOW MEDICATIONS FOR NCLEX

## ANALGESICS

- **Opioids**
- **↑ pain threshold by altering pain perception**



Common Brand Names	Generic Names
Demerol	Meperidine HCL
Dilaudid	Hydromorphone
Duragesic, Sublimaze	Fentanyl
Morphine Sulfate	Morphine Sulfate
Vicodin, Norco	Hydrocodone

I danced like no one was watching but someone was watching, thought I was having a seizure and called an ambulance.

SNARKECARDS



## ANTICONVULSANTS

- **↑ interval between seizures**

Common Brand Name	Generic Name
Dilantin	Phenytoin
Neurontin	Gabapentin
Tegretol	Carbamazepine
Depakote	Valproic Acid

- **\*Neurontin is sometimes prescribed for chronic pain neuropathy**
- **\*Monitor blood levels: Dilantin, Tegretol, and Depakote**

## ANXIOLYTICS

- **Azasprirodecanedione derivatives**
- **↓ anxiety. Action unknown, thought to act by ↓ the amount/action of serotonin in certain parts of the brain.**

Common Brand Names	Generic Names
Buspar	Bupirone Hydrochloride



## ANTIDEPRESSANTS

- **SSRIs**
- **Act by inhibiting serotonin reuptake in CNS**

Common Brand Names	Generic Names
Celexa	Citalopram
Effexor	Venlafaxine
Lexapro	Escitalopram Oxalate
Paxil	Paroxetine
Prozac	Fluoxetine
Zoloft	Sertraline



## TRICYCLICS

- **Act by blocking reuptake of norepinephrine and serotonin at nerve endings**

Common Brand Names	Generic Names
Elavil	Amitriptyline

## BENZODIAZEPINES ( Pam & Lam)

- **Enhance/facilitate GABA, an inhibitory neurotransmitter**

Common Brand Names	Generic Names
Ativan	Lorazepam
Valium	Diazepam
Xanax	Alprazolam





Common Brand Names	Generic Names
Ambien	Zolpidem Tartrate
Lunesta	Eszopiclone



## ANTICOAGULANTS

- Interferes with blood clotting processes.  
Used to prevent thrombus and embolus

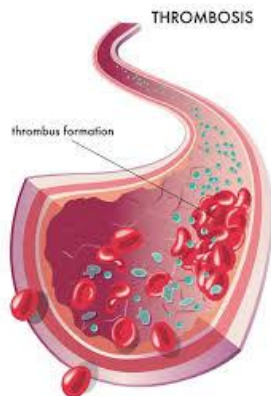
Common Brand Names	Generic Names
Coumadin	Warfarin
Lovenox	Enoxaparin
Heparin	Heparin Sodium-from beef/pork

## ANTIPLATELETS

- Interferes with the 1<sup>st</sup> step in the clotting process: platelet aggregation

Common Brand Names	Generic Names
ASA-aspirin	Acetylsalicylic Acid
Plavix	Clopidogrel

- \*Pepto-Bismol contains aspirin



## DIURETICS

- fluid volume in the body
- \*\*NI= monitor daily weight under standard conditions, assess BP, I&O, presence of edema

### LOOP DIURETICS

- Inhibit reabsorption of Na<sup>+</sup>, Cl<sup>-</sup>, K<sup>+</sup> and H<sub>2</sub>O (in loop of Henle), but also in proximal and distal renal tubules

Common Drug Names	Generic Names
Bumex	Bumetanide
Demadex	Torseamide
Lasix	Furosemide

### Thiazide Diuretics

- ↑ excretion of Na<sup>+</sup>, Cl<sup>-</sup>, K<sup>+</sup>, H<sub>2</sub>O in distal tube and ascending loop of Henle

Common Brand Names	Generic Names
Diuril	Chlorothiazide Sodium
Hydrodiuril, HCTZ	Hydrochlorothiazide
Zaroxolyn	Metolazone

### POTASSIUM-SPARING DIURETICS

- Contains aldosterone at receptor sites in distal tubule; excrete Na<sup>+</sup>, Cl<sup>-</sup>, H<sub>2</sub>O, not K<sup>+</sup>

Common Brand Names	Generic Names
Aldactone	Spironolactone
Dyrenium	Triamterene



## ANTIHYPERTENSIVES –(PRIL)

- ACE Inhibitors

- Block the conversion of angiotensin I to angiotensin II (potent vasoconstrictor)-Causing vasodilation and PVR (peripheral vascular resistance) without cardiac output/rate/contractility-Aldosterone is also blocked, causing a ↓ in Na<sup>+</sup> and H<sub>2</sub>O retention. Side effect: Nagging, nonproductive cough, angioedema

Common Brand Names	Generic Names
Altace	Ramipril
Capoten	Captopril
Prinivil, Zestril	Lisinopril
Vasotec	Enalapril

- \*check potassium level

## ALPHA 2 ANTAGONISTS

- centrally-acting anti-hypes causing ↓ amounts of norepinephrine to be released, ↓ sympathetic activity

Common Brand Names	Generic Names
Catapres	Clonidine



## BETA BLOCKERS-(OLOL)

- Prevent sympathetic stimulation of the heart, thus ↓ HR and contractility.
- ↓ myocardial irritability, depress automaticity of SA node, ↓ speed of AV & intraventricular conduction
- suppress release of renin from the kidneys.

Common Brand Names	Generic Names
Inderal	Propranolol
Lopressor	Metoprolol Tartrate
Toprol-XL	Metoprolol Succinate
Tenormin	Atenolol

- \*May cause bronchoconstriction.



## ALPHA 1 ADRENERGIC BLOCKERS -(ZOSYN)

- Dilate blood vessels and ↓ (PVR)

Common Brand Names	Generic Names
Hytrin	Terazosin
Minipress	Prazosin

## ALPHA & BETA ADRENERGIC BLOCKERS-(LOL)

- Alpha blockers-block alpha 1 receptors
  - vasodilation. Beta blockers-block beta 1 & beta 2 receptors:
- reduce HR, myocardial irritability, force of contraction
- depress automaticity of SA node,
  - speed of AV & intraventricular conduction
  - suppress release of renin from the kidneys

Common Brand Names	Generic Names
Coreg	Carvedilol
Trandate, Normodyne	Labetalol

## CALCIUM CHANNEL BLOCKERS

- Block Na<sup>+</sup> influx into the beta-receptors
- ↓ force of myocardial contraction/conductivity
- ↓ HR, ↓ PVR.
- Produce relaxation of coronary & vascular smooth muscle; dilates coronary arteries;
  - ↑ myocardial O<sub>2</sub> delivery, ↓ O<sub>2</sub> demand.
- Side effect: edema, dysrhythmias

Common Brand Names	Generic Names
Cardizem	Diltiazem
Norvasc	Amlodipine
Procardia	Nifedipine
Verelan, Isoptin, Calan	Verapamil





## ARBS-(SARTAN)

- block binding of angiotensin II at the receptor site, preventing vasoconstriction & aldosterone secreting effect usually caused by angiotensin II

Brand Names	Generic Names
Atacand	Candesartan
Cozaar	Losartan
Diovan	Valsartan



## CARDIAC GLYCOSIDES

- Positive inotropes (improve contractility and cardiac output)
- Negative dromotropic slow AV conduction rate.
- Negative chronotropes ↓ HR & improve cardiac output.
- Act as antiarrhythmic via tropic effect.
- \*\*NI=Monitor K+ level, S/S toxicity

Brand Names	Generic Names
Lanoxin	Digoxin

- \*Monitor Dig & K+ level, S/S toxicity

## BIGUANIDES

- ↓ hepatic glucose production & intestinal absorption of glucose
- improves insulin sensitivity (tissue response to insulin)

Brand Names	Generic Names
Glucophage	Metformin

- \*Initial drug therapy for newly DX T2DM.
- \*Most common side effect: GI.
- \*Rare side effect: Lactic acidosis

## GLIPTINS (DPP-4 Enzyme Inhibitors)

- ↑ levels of incretins-naturally occurring substances control blood sugar by ↑ insulin release, especially after a meal.

Brand Names	Generic Names
Januvia	Sitagliptin

## NITRATES

- Peripheral and coronary vasodilators.
- Treat/prevent angina, ↓ BP, ↓ preload/afterload, ↓ myocardial O2 demand.
- \*\*NI=rotate transdermal patches/remove after 12-14 hours =("patch free" interval of 10-12 hours daily)

Common Brand Names	Generic Names
Nitro BID Tridil Transderm Nitro Nitrostat	Nitroglycerin
Imdur	Isosorbide Mononitrate
Isorbid Isordil Sorbitrate	Isosorbide Dinitrate

- \*Check Potassium Level

## ANTI-DIABETICS

- Sulfonylureas
- Promotes insulin secretion by the pancreas; ↑ tissue response to insulin

Brand Names	Generic Names
Amaryl	Glimepiride
Diabeta Glynase Micronase	Glyburide
Glucotrol (XL)	Glipizide

## GLITAZONES-(GLITAZONE)

- Decrease insulin resistance

Brand Names	Generic Names
Actos	Pioglitazone
Avandia	Rosiglitazone

- \*Edema; HF secondary to renal retention of fluid





## PROTON PUMP INHIBITORS (PPI)

- Block final step of gastric acid production
- Ulcer-reducing

Brand Names	Generic Names
Nexium	Esomeprazole
Prilosec	Omeprazole
Protonix	Pantoprazole

## ANTIEMETICS

- Act by ↓ /preventing nausea & vomiting



Brand Names	Generic Names
Phenergan	Promethazine
Zofran	Ondansetron

## H2-HISTAMINE RECEPTOR ANTAGONISTS

- Inhibit histamine at histamine H2-receptor sites, ↓ gastric acid secretion

Brand Names	Generic Names
Pepcid	Famotidine
Zantac	Ranitidine

## ANTILIPIDEMICS

- STATINS (HMG-COA REDUCTASE INHIBITORS)
- Inhibits HMG-CoA reductase, an early step in cholesterol production

Brand Names	Generic Names
Crestor	Rosuvastatin
Lipitor	Atorvastatin
Zocor	Simvastatin

- \*Rhabdomyolysis, Hepatotoxicity

## MISCELLANEOUS ANTIPIPIDEMICS

Brand Names	Generic Names
<b>Zetia</b> • Selective cholesterol absorption inhibitor	<b>Ezetimibe</b> • Inhibits absorption of cholesterol by small intestine
<b>TriCor</b> • Fibric Acid Derivative	<b>Fenofibrate</b> • ↓ triglyceride synthesis in liver
<b>Lopid</b> • Fibric Acid Derivative	<b>Gemfibrozil</b> • ↓ triglyceride synthesis in liver
<b>Questran</b> • Bile acid sequestrant (food additive improving quality)	<b>Cholestyramine</b> • Binds bile acids, impeding absorption (elimination in feces)

## GI MEDS

- Non-absorbable medications used prophylactically to treat/prevent ulcers and GERD
- GI Protectant
- Mixes with gastric acid to form a protective coating of gastric mucosa

Brand Names	Generic Names
Carafate	Sucralfate

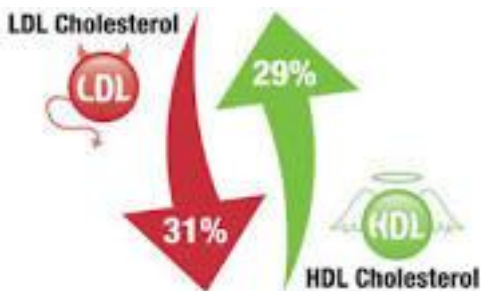


## GI STIMULANT

- Act by ↓ resting tone of esophageal sphincter
- Promotes gastric emptying/intestinal transit

Brand Names	Generic Names
Reglan	Metoclopramide

- \*Sometimes used with diabetic gastroparesis



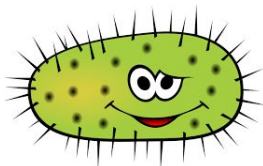




## STOOL SOFTENERS

- ↓ surface tension of interfacing liquid contents of the bowel-promoting additional liquid into stools=softer mass.

Brand Names	Generic Names
Colace	Docusate Sodium
Surfak	Docusate Calcium



## ANTI-INFECTIVES

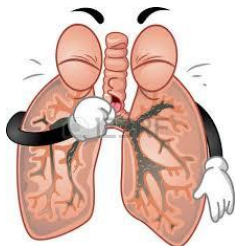
- Aminoglycosides

Brand Names	Generic Names
Gentamicin	Gentamicin Sulfate
Streptomycin	Streptomycin Sulfate
Tobramycin	Tobramycin Sulfate

## RESPIRATORY MEDICATIONS

- Bronchodilators
- Relax bronchial smooth muscle

Brand Names	Generic Names
Proventil, Ventolin	Albuterol Sulfate
Brovana	Arformoterol Tartrate
Foradil	Formoterol Fumarate
Atrovent	Ipratropium Bromide
Xopenex	Levalbuterol
Spiriva	Tiotropium
Advair Advair Diskus	Fluticasone/Salmeterol • *combo drug (flut-potent anti-inflam effects/Salm-bronch odilator)

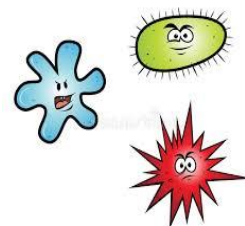


## CORTICOSTEROIDS

- ↓ inflammation, produce intentional immunosuppression, and treat adrenocortical insufficiency

Brand Names	Generic Names
Celestone	Betamethasone
Decadron	Dexamethasone
Deltasone	Prednisone
Solu-Cortef	Hydrocortisone
Solu-Medrol	Methylprednisolone

- \*Monitor WBC and Blood Glucose levels



## ANTIPROTOZOAL

Brand Names	Generic Names
Flagyl	Metronidazole

- \*No alcohol products, including mouthwash, aftershave, deodorant, bath splashes.
- Disulfiram- type reaction may occur (flushing, nausea, vomiting, palpitations).
  - β-LACTAMS
  - β-Lactam antibiotics include: PCNs, cephalosporins, monobactams, carbapenems
- \*Assess for allergies to any β-Lactam antibiotic

## CEPHALOSPORINS

Brand Names	Generic Names
Rocephin	Ceftriaxone
Maxipime	Cefepime
Mefoxin	Cefoxitin
Ancef	Cefazolin



## PENICILLINS

Brand Names	Generic Names
Amoxil	Amoxicillin
Omnipen	Ampicillin
Unipen	Nafcillin
Pipracil	Piperacillin
Zosyn	Piperacillin/Tazobactam

## SULFONAMIDES

Brand Names	Generic Names
Bactrim Bactrim DS Septra	SMZ-TMP Trimethoprim-Sulfa methoxazole



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\*Avoid or use with extreme caution if allergic to sulfa: Erythromycin-Sulfisoxazole, Sulfasalazine, Dapsone, Sulfonamides, Celebrex, Imitrex, Lasix, Hydrochlorothiazide HCTZ

## VANCOMYCIN

Brand Names	Generic Names
Vancocin	Vancomycin Hydrochloride

- \*Nephrotoxicity, Ototoxicity, Red-Man Syndrome
- \*Peak: 30 minutes to 1 hour after administration.
- \*Trough: 30 minutes before the next dose.



## CARBAPENEMS

Brand Names	Generic Names
Invanz	Ertapenem
Merrem	Meropenem
Primaxin	Imipenem

## FLUOROQUINOLONES (oxacin)

Brand Names	Generic Names
Cipro	Ciprofloxacin
Levaquin	Levofloxacin

- \*Tendon rupture.
- \*Adjust dosage for renal patients.

## TETRACYCLINES

Brand Names	Generic Names
Tetracycline	Tetracycline
Vibramycin	Doxycycline



## INSULINS

- lowering blood glucose by transporting glucose into cells
- promoting conversion of glucose to glycogen
- inhibiting the liver from changing glycogen to glucose

Types of Insulins	Names
Rapid-Acting	<u>Insulin Lispro-Humalog</u> <u>Insulin Aspart-Novolog</u>
Short-Acting	<u>Regular Insulin-Humulin R</u> <ul style="list-style-type: none"> <li>• Regular insulin is the only one given IV</li> <li>• Concentrated insulin-Insulin U-500</li> </ul>
Intermediate-Acting	<u>NPH-Humulin N, Novolin R</u>
Long-Acting	<u>Insulin Glargine-Lantus</u> <ul style="list-style-type: none"> <li>• Cannot mix with others</li> </ul> <u>Insulin Detemir-Levemir</u>
Premixed	<u>NPH/REG</u> <ul style="list-style-type: none"> <li>• Humulin 50/50</li> <li>• Humulin 70/30</li> <li>• Novolin 70/30</li> </ul> <u>Aspart protamine/aspart</u> <ul style="list-style-type: none"> <li>• Novolog Mix 70/30</li> </ul> <u>Lispro protamine/lispro</u> <ul style="list-style-type: none"> <li>• Humalog Mix 75/25</li> </ul>

Names	Onset	Peak	Duration
Lispro (Humalog)	5m	60-90min	4-6h
Aspart (Novolog)	10-20m	1-3h	3-5h
Regular (Humulin R)	SQ: 30-60m IV: 10-30m	SQ: 2-4h IV: 15-30m	SQ: 5-7h IV: 30-60m
U-500	2-3h	5-7h	
NPH (Humulin N, Novolin R)	8-12h	18-24h	
Glargine (Lantus)	None	24h	
Detemir (Levemir)	3-14h	24h	
NPH (Humulin 50/50, Humulin 70/30, Novolin 70/30)	4-8h	24h	
Aspart Protamine/aspart (Novolog mix 70/30)	1-4h	24h	
Lispro Protamine/lispro (Humalog mix 75/25)	2.8h	24h	