

## Must Know Drugs

## Fundamentals Drugs

1. Metoprolol (Lopressor, Toprol XL) (all -olols generally)
2. Aspirin (ASA)
3. Ibuprofen (Advil, Motrin)
4. Acetaminophen (Tylenol)
5. Oxycodone (Roxicodone, Percocet, Oxycontin)
6. Warfarin (Coumadin)
7. Lisinopril (Prinivil, Zestril) (all -prils generally)
8. Simvastatin (Zocor) (all -statins generally)
9. Docusate sodium (Colace)
10. Bisacodyl (Dulcolax)
11. Magnesium Hydroxide (Milk of magnesia)
12. Metformin (Glucophage)
13. Insulins (Regular, Lispro, Aspart, NPH, Glargine, Exubera)

## Metoprolol

- **Class:** Beta-blocker
- **Mechanism:** block beta receptors:
  - Lower heart rate, contractility, electrical conduction
- **Therapeutic Uses:** protect heart in MI, CAD, heart failure, tachy arrhythmia, performance anxiety
- **Adverse effects:** bradycardia, fatigue, impotence, low BP, heart failure, AV blocks
- **Interactions:** digoxin, other BP drugs, insulin: masks early signs of hypoglycemia
- **Nsg Actions:** monitor heart rate, BP

## Aspirin (ASA)

- **Class:** NSAID, COX-1 inhibitor
- **Mechanism:** blocks COX-1 and 2:
  - reduce inflammation and platelet aggregation
- **Therapeutic Uses:**
  - Prevention MI, Analgesic, Anti-inflammatory, antipyretic
- **Adverse effects:** Bleeding, ulcers, Reye's syndrome, salicylism, hypersensitivity
- **Interactions:** other NSAIDS, other drugs inhibit clotting
- **Nsg Actions:** educate CAD, dose (81,325), educate s/e

## Ibuprofen (Advil, Motrin)

- **Class:** NSAID, COX-1 inhibitor
- **Mechanism:** blocks COX-1 and 2:
  - reduce inflammation
- **Therapeutic Uses:**
  - Analgesic, Anti-inflammatory, antipyretic
- **Adverse effects:** Bleeding, ulcers, renal impairment
- **Interactions:** other NSAIDS, other drugs inhibit clotting
- **Nsg Actions:** assess pain, educate s/e

## Acetaminophen (Tylenol)

- **Class:** non-NSAID analgesic
- **Mechanism:** blocks 2 in CNS
- **Therapeutic Uses:**
  - Analgesic, antipyretic
- **Adverse effects:** liver toxicity with high doses
- **Interactions:** other liver toxic medications
- **Nsg Actions:** assess pain, <4000mg/day; liver pt: <2000mg

### Oxycodone (Roxicodone, Percocet, Oxycontin)

- **Class:** Opioid
- **Mechanism:** activates opioid receptors:
- **Therapeutic uses:** analgesic, cough suppression, diarrhea
- **Adverse effects:** resp depression, euphoria, sedation, constipation, miosis, itching, nausea, colic
- **Interactions:** other opioids & CNS depressant
- **Nsg Actions:** assess pain, resp rate, constipation (ambulate, H2O, fiber), fall precautions, light room, if resp < 6 then Narcan if ordered; Oxycontin: do not chew, give routinely, not PRN

### Warfarin (Coumadin)

- **Class:** anti-coagulant (clotting factors)
- **Mechanism:** inhibits Vitamin K metabolism → reducing amount of clotting factors
  - Inhibits clotting; increases bleeding
- **Therapeutic uses:**
  - prevention of DVT and recurrent MI, Stroke
  - Tx of hypercoagulables d/o: SLE, atrial fibrillation, mechanical heart valves
- **Adverse effects:** bleeding, petechiae, FOBT
- **Interactions:** everything
- **Nsg Actions:** monitor INR, assess s/s bleeding

### Lisinopril (Prinivil, Zestril)

- **Class:** ACE Inhibitor (ACE: Angiotensin Converting Enzyme)
- **Mechanism:** Blocks ACE
  - Vasodilation, prevention of vascular remodeling
- **Therapeutic uses:** HTN, HF, prevent kidney complications in DM
- **Adverse effects:** hypotension esp 1<sup>st</sup> dose, cough, hyperkalemia, angioedema
- **Interactions:** other BP drugs, drugs affect K+: furosemide, digoxin
- **Nsg actions:** assess BP, monitor K+

### Simvastatin (Zocor) (all –statins generally)

- **Class:** HMG co-A reductase inhibitor (statin)
- **Mechanism:** inhibits rate limiting step in cholesterol production: lowers cholesterol
- **Therapeutic Uses:** reduce risk of MI
- **Adverse effects:** Nausea, GI pain, muscle pain, *rhabdomyolysis*, memory loss (uncommon)
- **Interactions:** fibrates increase risk of Rhabdo
- **Nsg actions:** give at night, monitor LFTs

### Docusate sodium (Colace)

- **Class:** surfactant laxative (stool softener)
- **Mechanism:** reduces surface tension of H2O, allowing it to penetrate stool; softens stool
- **Therapeutic uses:** relieve constipation; prevent straining during defecation
- **Adverse effects:** loose stools
- **Interactions:**
- **Nsg Actions:** monitor stool

### Bisacodyl (Dulcolax)

- **Class:** Stimulant laxative
- **Mechanism:** stimulates bowel movement
- **Therapeutic uses:** constipation
- **Adverse effects:** abd pain, diarrhea
- **Interactions:**
- **Nsg Actions:** monitor stools, never give to patient with impaction, rectal suppository works <2 hrs; PO 8 hours

### Magnesium Hydroxide (Milk of magnesia, Mylanta, Maalox)

- **Class:** Osmotic Laxative; antacid
- **Mechanism:** pulls water into bowel; neutralizes acid (usually given with Aluminum)
- **Therapeutic uses:** constipation; dyspepsia
- **Adverse effects:** abd pain, diarrhea
- **Interactions:** affects absorption of some drugs
- **Nsg Actions:** monitor renal function, stools, & fluid status; time administration of other meds

### Metformin (Glucophage)

- **Class:** biguanide oral hypoglycemic
- **Mechanism:** inhibits liver production and secretion of glucose; enhances glucose uptake:
  - Lowers blood glucose levels
- **Therapeutic uses:** lower glucose in Diabetes 2
- **Adverse effects:** nausea, GI discomfort, weightloss, toxicity: lactic acidosis
- **Interactions:** other hypoglycemic drugs
- **Nsg Actions:** never give to pts with HF or renal failure

### Insulins (Regular, Lispro, Aspart, NPH, Glargine, Exubera)

- **Class:** hormone, hypoglycemic
- **Mechanism:** causes cellular uptake of glucose;
  - Lowers blood glucose levels
- **Therapeutic use:** lower glucose in Diabetes 1 and 2; lower K+ levels (IV only)
- **Adverse effects:** hypoglycemia, hypokalemia (IV)
- **Interactions:** other hypoglycemic drugs, beta blockers: block s/s hypoglycemia
- **Nsg Actions:** monitor glucose, give food, monitor K+ (IV only): see next page; do not interchange types; rotate injection sites

### Insulin Types

- **Regular (natural):** lasts ~4 hours; only one used IV; used in insulin pumps; SSI
- **Lispro, Aspart:** work even faster and shorter than regular insulin; do not give until pt has food; SSI
- **NPH:** medium acting insulin lasts ~12-16 hours
- **Glargine:** lasts ~24 hours; no peak; cannot be mixed with other insulins
- **Exubera:** inhaled; dosed in mg instead of units

### Medical – Surgical I Drugs

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| 1. Ferrous sulfate                 | 11. Furosemide (Lasix)               |
| 2. Prednisone, methylprednisolone  | 12. Hydrochlorothiazide              |
| 3. Enoxaparin (Lovenox)            | 13. Sertraline (Zoloft)              |
| 4. Heparin                         | 14. Lorazepam (Ativan)               |
| 5. Albuterol                       | 15. Promethazine (Phenergan)         |
| 6. Ipratropium                     | 16. Ondansetron (Zofran)             |
| 7. Piperacillin-tazobactam (Zosyn) | 17. Metoclopramide (Reglan)          |
| 8. Vancomycin (Vanco)              | 18. Pantoprazole (Protonix)          |
| 9. Ceftriaxone (Rocephin)          | 19. Famotidine (Pepcid)              |
| 10. Azithromycin (Zithromax)       | 20. Diphenoxylate/atropine (Lomotil) |

### Ferrous Sulfate

- **Class:** Iron Salt
- **Mechanism:** Supplements Dietary Iron
- **Therapeutic uses:** Tx or prevent Fe Deficiency anemia
- **Adverse effects:** nausea, constipation, dark stools diarrhea, stains teeth (liquid solution)
- **Interactions:** antacids, tetracyclines, Vitamin C
- **Nsg Actions:** give with meals to reduce adverse; give on empty stomach to increase absorption; keep out of reach of children

## Prednisone, Methylprednisolone

- **Class:** moderate glucocorticoid (corticosteroid)
- **Mechanism:** activates cortisol receptors inhibiting inflammation
- **Therapeutic uses:** anti-inflammatory: COPD, asthma, inflammatory diseases; anti-immune (large doses)
- **Adverse effects:** hyperglycemia, weight gain, fat redistribution (face, neck, belly), muscle wasting, impaired wound healing, subcutaneous collagen loss, osteoporosis, adrenal suppression, infection, cataracts
- **Interactions:** enhances albuterol sensitivity, NSAIDs, hypoglycemics
- **Nsg Actions:** do not discontinue suddenly, educate adverse effects, exercise, assess for adverse effects

## Heparin

- **Class:** Anti-coagulant (intrinsic pathway)
- **Mechanism:** inhibits thrombin and Factor Xa, inhibiting clotting cascade
- **Therapeutic uses:** PE, Stroke, DVT, dialysis, heart surgery, MI, prophylaxis DVT, DIC, pregnancy safe
- **Adverse effects:** bleeding, HIT, hypersensitivity; NEVER give to neurosurgery patients
- **Interactions:** anticoagulants, antiplatelets
- **Nsg Actions:** check PTT, protamine sulfate is antidote; 5000u SQ BID-TID for prophylaxis, assess for bleeding; bleeding precautions

## Enoxaparin (Lovenox)

- **Class:** Anti-coagulant (intrinsic pathway)
- **Mechanism:** inhibits Factor Xa, inhibiting clotting cascade
- **Therapeutic uses:** DVT, esp. post-surgery, PE, MI
- **Adverse effects:** bleeding, HIT, hypersensitivity; NEVER give to neurosurgery patients
- **Interactions:** anticoagulants, antiplatelets
- **Nsg Actions:** assess for bleeding; bleeding precautions, weight based dosing

## Albuterol

- **Class:** short acting beta2 agonist; bronchodilator
- **Mechanism:** activates beta2 receptors in bronchi → bronchodilation, motivate cilia
- **Therapeutic uses:** COPD, asthma, bronchitis
- **Adverse effects:** tachycardia, angina, tremor
- **Interactions:** steroids enhance
- **Nsg Actions:** Assess resp; educate MDI and Neb use.

## Ipratropium

- **Class:** anticholinergic; bronchodilator
- **Mechanism:** blocks muscarinic receptors in bronchi → bronchodilation, motivate cilia, reduce mucus secretion
- **Therapeutic uses:** COPD, asthma
- **Adverse effects:** none
- **Interactions:** none
- **Nsg Actions:** Assess resp; educate MDI and Neb use.

## Piperacillin-Tazobactam (Zosyn)

- **Class:** extended spectrum penicillin plus beta lactamase inhibitor (beta-lactam)
- **Mechanism:** disrupts crossbridges in the bacterial cell wall, weakening it
- **Therapeutic uses:** Infection, esp Pseudomonas
- **Adverse effects:** allergy, bleeding 2° platelet dysfunction
- **Interactions:** don't mix with aminoglycosides
- **Nsg Actions:** IV only

### Vancomycin

- **Class:** novel antibiotic (no class)
- **Mechanism:** Weakens bacterial cell wall
- **Therapeutic uses:** MRSA, C Diff.
- **Adverse effects:** Ototoxicity, Nephrotoxicity
- **Interactions:** none
- **Nsg Actions:** Infuse slowly (60 min) to avoid Red man syndrome; CDC 12 step program

### Ceftriaxone (Rocephin)

- **Class:** cephalosporin; 3<sup>rd</sup> gen; beta lactam
- **Mechanism:** disrupts crossbridges in the bacterial cell wall, weakening it
- **Therapeutic uses:** CAP, nosocomial infections; gonorrhea, H influenzae, Proteus, Salmonella, Klebsiella
- **Adverse effects:** Allergic reaction
- **Interactions:** None
- **Nsg Actions:** Given IM or IV; 500mg IM X1

### Azithromycin (Zithromax, Z-pack)

- **Class:** macrolide antibiotic
- **Mechanism:** inhibit protein synthesis (bind to ribosomes)
- **Therapeutic uses:** Resp infections, otitis media, mycoplasma pneumonia (atypical), pts with penicillin allergy
- **Adverse effects:** Diarrhea, nausea, abd pain
- **Interactions:** Antacids
- **Nsg Actions:** Take on empty stomach, 3-5 PO day course, stays in body for 10 days; IV in hospital

### Furosemide (Lasix)

- **Class:** Loop Diuretic
- **Mechanism:** Inhibits reabsorption of sodium in Loop of Henle causing diuresis
- **Therapeutic uses:** Fluid overload, edema, CHF, hypertension, works in renal insufficiency
- **Adverse effects:** Hypovolemia, Tachycardia, hypokalemia, hyponatremia, sulfa allergy, ototoxicity
- **Interactions:** other K+, other BP or diuretics, other ototoxic drugs
- **Nsg Actions:** Assess UOP, K+, BP

### Hydrochlorothiazide (HCTZ)

- **Class:** Thiazide Diuretic
- **Mechanism:** Inhibits reabsorption of sodium in distal convoluted tubule causing diuresis
- **Therapeutic uses:** hypertension, edema in mild CHF
- **Adverse effects:** Hypovolemia, Tachycardia, hypokalemia, hyponatremia,
- **Interactions:** other K+, other BP or diuretics
- **Nsg Actions:** Assess UOP, K+, BP

### Sertraline (Zoloft)

- **Class:** SSRI (Selective Serotonin Reuptake Inhibitor)
- **Mechanism:** inhibits neurons from reuptaking serotonin, making more available in synapse
- **Therapeutic uses:** depression, panic d/o, OCD, PTSD, PDD, social anxiety
- **Adverse effects:** H/A, sexual dys, weight gain, tremor, insomnia, agitation, N/D, Serotonin syndrome (<72hrs), withdrawal
- **Interactions:** MAOI
- **Nsg Actions:** Assess adverse effects, educate 2 weeks before begins working; do not d/c suddenly

### Lorazepam (Ativan)

- **Class:** benzodiazepine
- **Mechanism:** makes GABA receptors more active, slowing neural activity
- **Therapeutic uses:** anxiety, insomnia, seizures, ETOH withdrawal (prevent DTs)
- **Adverse effects:** CNS depression (sedation), anterograde amnesia (blackout), Resp depression, abuse, paradoxical effects
- **Interactions:** other CNS depressants, esp opioids and ETOH
- **Nsg Actions:** assess, fall precautions, educate about interactions; monitor resp if on other CNS depressants

### Promethazine (Phenergan)

- **Class:** antiemetic
- **Mechanism:** suppresses dopamine in CTZ
- **Therapeutic uses:** suppression of nausea and vomiting
- **Adverse effects:** confusion, disorientation, sedation, anticholinergic symptoms, hypotension, EPS
- **Interactions:** other CNS depressants, anticholinergics
- **Nsg Actions:** IV, IM or PO; give early to prevent vomiting; assess for adverse effects; push IV slowly (10min)

### Ondansetron (Zofran)

- **Class:** antiemetic
- **Mechanism:** blocks serotonin receptors
- **Therapeutic uses:** prevent N/V, esp w/chemo
- **Adverse effects:** H/A, diarrhea, dizziness
- **Interactions:** enhanced by steroids
- **Nsg Actions:** Give before 30 min before chemo, give before vomiting occurs, assess pt for dehydration and electrolytes

### Metoclopramide (Reglan)

- **Class:** prokinetic
- **Mechanism:** 1) blocks dopamine and serotonin in CTZ; 2) increases upper GI motility by enhancing ACH
- **Therapeutic uses:** suppress post op N/V, and other vomiting, diabetic gastroparesis, GERD
- **Adverse effects:** sedation, diarrhea, EPS
- **Interactions:** diphenhydramine reduces EPS
- **Nsg Actions:** Never give to pt with GI obstruction or perforation

### Pantoprazole (Protonix)

- **Class:** Proton Pump Inhibitor
- **Mechanism:** Inhibits proton pump, preventing gastric acid production
- **Therapeutic uses:** duodenal and gastric ulcers, GERD, hypersecretion; offlabel: reduce aspiration of stomach acid
- **Adverse effects:** diarrhea, H/A, dizziness, pneumonia
- **Interactions:**
- **Nsg Actions:** PO or IV; Assess

### Famotidine (Pepcid)

- **Class:** H2 blocker
- **Mechanism:** inhibits histamine-2 receptors in stomach reducing acid secretions
- **Therapeutic uses:** Prevent duodenal ulcers, treat gastric ulcers, GERD, Zollinger-Ellison, offlabel: Prevent aspiration of stomach acid
- **Adverse effects:** confusion, hallucinations, CNS depression, Pneumonia
- **Interactions:** PPIs
- **Nsg Actions:** PO or IV; assess for adverse effects (esp IV in elderly), educate

### Diphenoxylate/atropine (Lomotil)

- **Class:** anti-diarrheal (opioid/anticholinergic combo)
- **Mechanism:** slows GI tract, reducing diarrhea
- **Therapeutic uses:** diarrhea,
- **Adverse effects:** constipation, euphoria, anticholinergic effects
- **Interactions:**
- **Nsg Actions:** Assess for s/s dehydration, electrolytes, abuse

### Medical – Surgical II Drugs

1. Digoxin (Lanoxin)
2. Losartan (Cozaar) (all –sartans generally)
3. Amlodipine (Norvasc)
4. Verapamil (Calan)
5. Diltiazem (Cardizem)
6. Clonidine (Catapres)
7. Nitroglycerine, SL, paste, & Isosorbide dinitrate
8. Amiodarone (Cordarone)
9. Glipizide (Glucotrol)
10. Rosiglitazone (Avandia)
11. Thyroxine (Synthroid, Levothyroid)
12. Alendronate (Fosamax)
13. Carbamazepine (Tegretol)
14. Phenytoin (Dilantin)
15. Carvedilol (Coreg)
16. Ciprofloxacin (Cipro) & Levofloxacin (Levaquin)
17. Atropine
18. Celecoxib (Celebrex)
19. Clopidogrel (Plavix)
20. Morphine, MS Contin

### Digoxin (Lanoxin)

- **Class:** cardiac glycoside
- **Mechanism:** competes with K<sup>+</sup> in the cardiac Na-K pump; ↓ HR, ↓ conduction, ↑ contractil
- **Therapeutic uses:** heart failure, A. fib, A. flutt
- **Adverse effects:** bradycardia, arrhythmias, anorexia, NVD
- **Interactions:** tons, anything that affects K<sup>+</sup>, heart rhythm
- **Nsg Actions:** AP HR, ECG IV, levels, falls

### Losartan (Cozaar) (all –sartans generally)

- **Class:** ARB
- **Mechanism:** blocks Angiotensin II type I receptors (AT1), vasodilation, ↓ aldosterone
- **Therapeutic uses:** HTN, HF, DM
- **Adverse effects:** diarrhea, hypotension, Angioedema, hyperkalemia
- **Interactions:** K<sup>+</sup>, other HTN
- **Nsg Actions:** BP, adverse effects

### Amlodipine (Norvasc)

- **Class:** Calcium channel blocker (dihydro-)
- **Mechanism:** prevents smooth muscle contraction (arterial only); vasodilation
- **Therapeutic uses:** HTN, angina pectoris
- **Adverse effects:** headache, edema, flushing
- **Interactions:** other HTN, fentanyl, ETOH, lithium
- **Nsg Actions:**

### Verapamil (Calan)

- **Class:** Calcium channel blocker (nondihydro-)
- **Mechanism:** prevents smooth muscle contraction (CV, arterial); vasodilation, ↓ contractility, ↓ HR, ↓ conduction
- **Therapeutic uses:** HTN, angina, arrhythmia
- **Adverse effects:** arrhythmia, CHF, constipation, bradycardia, dizziness
- **Interactions:** other HTN, fentanyl, ETOH, lithium, other chronotropic, inotropic, dromotropics, grape fruit
- **Nsg Actions:** BP, HR, CHF, SR version

### Diltiazem (Cardizem)

- **Class:** Calcium channel blocker (nondihydro-)
- **Mechanism:** prevents smooth muscle contraction (CV, arterial); vasodilation, ↓ contractility, ↓ HR, ↓ conduction
- **Therapeutic uses:** HTN, angina, arrhythmia
- **Adverse effects:** arrhythmia, CHF, constipation, bradycardia, dizziness, edema
- **Interactions:** other HTN, fentanyl, ETOH, lithium, other chronotropic, inotropic, dromotropics, grape fruit
- **Nsg Actions:** BP, HR, CHF, SR version

### Clonidine (Catapres)

- **Class:** alpha-2 agonist (central)
- **Mechanism:** stimulates central alpha-2 receptors causing reduced norepinephrine
- **Therapeutic uses:** HTN, cancer pain (epidural)
- **Adverse effects:** drowsiness, dry mouth, withdrawal, bradycardia, hypotension
- **Interactions:** other CNS depressants, MAO inhibitors
- **Nsg Actions:** PO and transdermal (7 days)

### Nitroglycerin, SL, paste, & Isosorbide dinitrate, mononitrate

- **Class:** organic nitrate
- **Mechanism:** venous and arterial dilation; reduces myocardial oxygen consumption
- **Therapeutic uses:** angina, MI, USA, HF
- **Adverse effects:** headache, hypotension, dizziness, tachycardia, syncope, tolerance
- **Interactions:** Viagra et al., other HTN, antichol
- **Nsg Actions:** SL protect from light, replace after 6 months, monitor BP, pain, H/A, glass bottle and special tubing; nitrate free period for long acting

### Amiodarone (Cordarone)

- **Class:** potassium channel blocker
- **Mechanism:** prolongs action potential, inhibits sympathetic, slows sinus, PR, QT, vasodilation
- **Therapeutic uses:** arrhythmias
- **Adverse effects:** ARDS, CHF, arrhythmias, Liver tox, Common: bradycardia, hypotension, dizziness, fatigue, ataxia, paresthesia, neuropathy, tremor
- **Interactions:** digoxin, other arrhythmics, grapefruit
- **Nsg Actions:** ECG during initiation, monitor for ARDS, 2<sup>nd</sup> check, IV filter, glass bottle

### Glipizide (Glucotrol)

- **Class:** sulfonylurea
- **Mechanism:** stimulates insulin secretion
- **Therapeutic uses:** DM 2
- **Adverse effects:** hypoglycemia, weight gain, photosensitivity, aplastic anemia
- **Interactions:** ETOH, diuretics, steroids, warfarin, beta blockers
- **Nsg Actions:** monitor glucose, teach patients s/s, medic alert, CBC, eat within 30 minutes, IR vs XL

### Rosiglitazone (Avandia)

- **Class:** thiazolidinediones, -glitazone
- **Mechanism:** decreases insulin resistance
- **Therapeutic uses:** DM 2
- **Adverse effects:** CHF (fluid retention), edema, cholesterol, lactic acidosis (fatal)
- **Interactions:**
- **Nsg Actions:** monitor for CHF, teach s/s CHF, lactic acidosis (malaise, myalgia, dyspnea, somnolence, ABD, hypertension, bradycardia)



### Thyroxine (Synthroid, Levothroid)

- **Class:** thyroid hormone
- **Mechanism:** metabolic activity: gluconeogenesis, glycogenolysis, protein synthesis, cell growth, brain CNS development
- **Therapeutic uses:** hypothyroidism, prevent Cretinism
- **Adverse effects:** thyrotoxicosis: insomnia, tachycardia, angina pectoris, diaphoresis, weightloss, heat intolerance
- **Interactions:** Warfarin, sympathomimetics, hypoglycemics
- **Nsg Actions:** Apical pulse, teach lifelong therapy

### Alendronate (Fosamax)

- **Class:** biphosphonate
- **Mechanism:** incorporate into bone and inhibit osteoclasts; reduced bone loss
- **Therapeutic uses:** osteoporosis, Paget's disease
- **Adverse effects:** esophagitis, musculoskeletal pain
- **Interactions:** calcium, antacids, food
- **Nsg Actions:** empty stomach, 8oz of water, sitting for 30 minutes, 1/week vs daily

### Carbamazepine (Tegretol)

- **Class:** antiepileptic (anticonvulsant)
- **Mechanism:** inhibits sodium channels
- **Therapeutic uses:** seizures, trigeminal neuralgia, bipolar
- **Adverse effects:** ataxia, drowsiness, aplastic anemia, neutropenia, thrombocytopenia, Steven-Johnson's, toxic epidermal necrolysis
- **Interactions:** lots, acetaminophen, lithium, MAO inhibitors (death), grapefruit
- **Nsg Actions:** monitor skin, CBC, genetic testing for Asian patients

### Phenytoin (Dilantin)

- **Class:** antiepileptic
- **Mechanism:** inhibits sodium channels
- **Therapeutic uses:** seizure d/o, arrhythmias (old)
- **Adverse effects:** ataxia, sedation, diplopia, hypotension, gingival hyperplasia, aplastic anemia, neutropenia
- **Interactions:** lots
- **Nsg Actions:** EXPONENTIAL KINETICS, check levels, oral hygiene, CBC, calcium, albumin

### Carvedilol (Coreg)

- **Class:** nonselective beta blocker
- **Mechanism:** blocks beta 1, 2, and alpha 1; ↓HR, contractility, conduction, vasodilation
- **Therapeutic uses:** HF, HTN
- **Adverse effects:** bradycardia, heart block, hypotension, dizziness, fatigue, weakness, hyperglycemia, impotence, mask hypoglycemia,
- **Interactions:** other CV meds
- **Nsg Actions:** HR, BP, glucose, educate

### Ciprofloxacin (Cipro) & Levofloxacin (Levaquin)

- **Class:** fluoroquinolones
- **Mechanism:** inhibit bacterial DNA synthesis
- **Therapeutic uses:** bacterial infections of all kinds: esp, resp & GU. Also skin, GI
- **Adverse effects:** seizures, liver, C diff, tendinitis and rupture
- **Interactions:** Calcium and antacids
- **Nsg Actions:** do not give with metal supplements

### Atropine

- **Class:** anticholinergic (antimuscarinic)
- **Mechanism:** blocks acetylcholine receptors
- **Therapeutic uses:** bradycardia, heart block, preop, dilate eye, cholinesterase inhibitor poisoning
- **Adverse effects:** tachycardia, dry mouth, dry eyes, constipation, urinary retention, mydriasis, anhidrosis, dementia (blind as a bat...)
- **Interactions:**
- **Nsg Actions:** ECG, reassure flushing

### Celecoxib (Celebrex)

- **Class:** COX-2 inhibitor
- **Mechanism:** inhibits prostaglandin synthesis, reducing inflammation and pain
- **Therapeutic uses:** arthritis (all kinds), acute pain
- **Adverse effects:** GI bleeding, Steven Johnson's
- **Interactions:** warfarin and lithium
- **Nsg Actions:** cross reactivity with sulfa

### Clopidogrel (Plavix)

- **Class:** ADP inhibitor
- **Mechanism:** inhibits platelet aggregation and degranulation, inhibits arterial clots
- **Therapeutic uses:** MI, Stroke, PAD reduction
- **Adverse effects:** bleeding, neutropenia, TTP
- **Interactions:** other antiplatelet, anticoagulant, several herbal/natural supplements
- **Nsg Actions:** monitor CBC, educate

### Morphine, MS Contin

- **Class:** Strong Opioid
- **Mechanism:** stimulates opioid receptors
- **Therapeutic uses:** pain, MI
- **Adverse effects:** resp depression, confusion, sedation, euphoria, hypotension, constipation, urinary retention, itching, biliary colic, miosis, tolerance, withdrawal
- **Interactions:** other CNS depressants (benzos, ETOH, tricyclics), MAO inhibitors
- **Nsg Actions:** monitor resp, pain, adverse, teach, fall precautions, constipation, bright room