

PHARMACOLOGY FINAL 2023 (FALL semester 6)

Nota Bene!

1. All lecture notes & didactic materials You can find on:

<https://farmacologie.usmf.md/en/node/14228/pharmacology/didactic-materials>

2. PHARMACOLOGY BOOK:

https://farmacologie.usmf.md/sites/default/files/inline-files/Pharmacology%20Book_0.pdf

DRUGS AFFECTING THE RESPIRATORY SYSTEM, CARDIOVASCULAR SYSTEM, DIGESTIVE SYSTEM

Respiratory

1. Determine antitussive opioid drug(s):
2. Determine antitussive non opioid drug(s) with central action:
3. Determine antitussive drug(s) with peripheral action:
4. Determine the indications for opioid antitussive(s):
5. Determine the indications for non opioid antitussive(s):
6. Determine secretostimulating expectorant(s):
7. Determine thyolic derivative(s) used as expectorants:
8. Determine proteolytic enzyme(s) used as expectorants:
9. Determine stimulant(s) of surfactant secretion:
10. Determine respiratory analeptic drug(s):
11. Determine indication(s) for the use of analeptic drugs:
12. Determine the indication(s) of secretostimulating expectorants:
13. Determine the mechanism(s) of action of acetylcysteine:
14. Determine the mechanisms of action of bromhexine:
15. Determine the indications for secretolytic expectorants:
16. Determine the group(s) of drugs used in bronchial asthma:
17. Determine the sympathomimetic(s) used as bronchodilator(s):
18. Determine beta2-adrenomimetic(s) used as bronchodilator(s):
19. Determine beta2-adrenomimetic(s) used in bronchial asthma attack:
20. Determine the antagonists of leukotriene receptors used in bronchial asthma:
21. Determine the side effects of beta-adrenomimetics used as bronchodilators:
22. Determine the M-cholinoblocker(s) used as bronchodilator(s):
23. Determine the effect(s) of M-cholinoblockers used as bronchodilators:
24. Determine the indication(s) of M-cholinoblockers used as bronchodilators:
25. Determine adverse effect(s) of M-cholinoblockers used as bronchodilators:
26. Determine inhaled glucocorticoid(s) used in bronchial asthma:
27. Determine the methylxanthine(s) used as bronchodilators:
28. Determine the mechanism(s) of action of methylxanthines as bronchodilators:
29. Determine the indications for methylxanthines as bronchodilators:
30. Determine side effects of methylxanthines used as bronchodilators:
31. Determine drugs used in pulmonary edema corresponding to their purpose of use:

CARDIOVASCULAR

Antiarrhythmics.

1. Determine antiarrhythmic(s) from group 1A:
2. Determine antiarrhythmic(s) from group 1B:
3. Determine the indication(s) of antiarrhythmics of group 1B:
4. Determine antiarrhythmic(s) from group 1C:
5. Determine mechanism(s) of action of sodium channel blockers used as antiarrhythmic(s):
6. Determine beta-adrenoblocker(s) used as antiarrhythmic(s):

7. Determine the indications of beta-adrenoblockers:
8. Determine the side effects of beta-adrenoblockers:
9. Determine the antiarrhythmic(s) that block calcium channels:
10. Determine the side effect(s) of calcium channel blockers used as antiarrhythmics:
11. Determine the antiarrhythmic(s) that block potassium channels:
12. Determine the mechanism(s) of action of amiodarone:
13. Determine the indication(s) of amiodarone:
14. Determine side effect(s) of amiodarone:
15. Determine the indication(s) of adenosine:
16. Determine the side effect(s) of adenosine:

Cardiac glycosides and cardiostimulants.

1. Determine inotropic-positive drug(s)
2. Determine Na,K-ATP-ase inhibitor(s)
3. Determine the mechanism(s) of action of Na,K-ATP-ase inhibitors
4. Determine the effect(s) of cardiac glycosides on the functions of the heart
5. Determine hemodynamic effect(s) of cardiac glycosides
6. Determine the indication(s) for the use of Na,K-ATP-ase inhibitors
7. Determine drugs used in the treatment of intoxication with cardiac glycosides correlating with their purpose of use
8. Determine phosphodiesterase inhibitor(s) with direct positive inotropic effect
9. Determine the mechanism(s) of action of amrinone
10. Determine the effect(s) of amrinone
11. Determine the mechanism(s) of action of levosimendan
12. Determine the effect(s) of levosimendan
13. Determine drugs used in the treatment of acute heart failure
14. Determine drugs used in the treatment of chronic heart failure
15. Determine the groups of drugs that strengthen heart contractility and increase cardiac output
16. Determine the mechanism(s) of action of positive inotropic drugs
17. Determine direct acting positive inotropic drug(s)
18. Determine indirect acting positive inotropic drug(s)

Antianginal drugs, cerebral and peripheral vassodilators. Antimigrenous drugs. Venotrops

1. Determine the antianginal drug(s) that decrease myocardial oxygen demand and increase myocardial oxygen delivery:
2. Determine the antianginal drug(s) that decrease myocardial oxygen demand:
3. Determine the antianginal drug(s) that increase myocardial oxygen delivery:
4. Determine the cardioprotector(s) used in the treatment of angina pectoris:
5. Determine antithrombotic agent(s) used in the treatment of angina pectoris:
6. Determine drug(s) used for cessation of angina pectoris attack:
7. Determine the mechanism(s) of action of organic nitrates:
8. Determine the effect(s) of organic nitrates:
9. Determine the indication(s) for organic nitrates:
10. Determine the side effect(s) of organic nitrates:
11. Determine the mechanism(s) of antianginal action of beta-adrenoblockers:
12. Determine the mechanism(s) of action of calcium channel blockers:
13. Determine the indication(s) of calcium channel blockers:
14. Determine the side effect(s) of dihydropyridine calcium channel blockers:

15. Determine the side effect(s) of non-dihydropyridine calcium channel blockers:
16. Determine the effect(s) of calcium channel blockers:
17. Determine the effect(s) of ranolazine:
18. Determine the effect(s) of beta-blockers:
19. Determine the indications of beta-blockers:
20. Determine the mechanism(s) of action of trimetazidine:
21. Determine the medicine(s) used in acute myocardial infarction:

Vasodilators (Antihypertensives) and vasoconstrictors (Antihypotensive).

1. Determine neurotropic antihypertensive(s):
2. Determine myotropic antihypertensive(s):
3. Determine angiotensin converting enzyme inhibitor(s)
4. Determine angiotensin receptor blocker(s)
5. Determine dihydropyridine calcium channel blocker(s)
6. Determine potassium channel activator(s)
7. Determine arteriodilator(s)
8. Determine arterio-venodilator drug(s)
9. Determine the effect(s) of centrally acting antihypertensives
10. Determine the mechanism(s) of action of centrally acting antihypertensive preparations
11. Determine the mechanism(s) of action and effects of alpha-adrenoblockers used as antihypertensives
12. Determine the side effect(s) of alpha-adrenoblockers used as antihypertensives
13. Determine the mechanism(s) of antihypertensive effect of beta-adrenoblockers
14. Determine the indication(s) of beta-adrenoblockers
15. Determine the side effect(s) of beta-adrenoblockers
16. Determine the effect(s) of dihydropyridine calcium channel blockers
17. Determine the effect(s) of non-dihydropyridine calcium channel blockers
18. Determine the side effect(s) of non-dihydropyridine calcium channel blockers
19. Determine the indication(s) of dihydropyridine calcium channel blockers
20. Determine the indication(s) for angiotensin-converting enzyme inhibitors
21. Determine the adverse reaction(s) of angiotensin-converting enzyme inhibitors
22. Determine the contraindication(s) of angiotensin-converting enzyme inhibitors
23. Determine the indication(s) of angiotensin receptor blockers
24. Determine the effect(s) of sodium nitroprusside
25. Determine the indication(s) of sodium nitroprusside
26. Determine the mechanism(s) of action of potassium channel openers
27. Determine the effect(s) of potassium channel openers
28. Determine the indications of potassium channel openers
29. Determine the preparation(s) used in hypertensive crises
30. Determine vasoconstrictor(s) used as antihypotensives
31. Determine antihypotensive(s) that increase cardiac output
32. Determine the indication(s) of antihypotensives from alpha-beta-adrenomimetics
33. Determine the effect(s) of antihypotensives from alpha-adrenomimetics
34. Determine the mechanism(s) of action of isothiourea derivatives
35. Determine the effect(s) of isothiourea derivatives
36. Determine the effect(s) of antihypotensives from beta-1-adrenomimetics
37. Determine indication(s) of antihypotensives from beta-1-adrenomimetics
38. Determine myotropic antiischemic vasodilator(s)
39. Determine neurotropic antiischemic vasodilator(s)
40. Determine the indication(s) for the vinca minor alkaloids

41. Determine the pharmacodynamics of ergot alkaloid derivatives as cerebral vasodilators
42. Determine the indications of ergot alkaloid derivatives as cerebral vasodilators
43. Determine the preparation(s) used in migraine attacks
44. Determine the mechanism of action and effects of triptans (indol derivatives)

Diuretics. Drugs which are used in nephrolithiasis and gout treatment. drugs with influence upon acid-base balance.

1. Determine diuretic(s) acting in proximal convoluted tubule (PCT)
2. Determine diuretic(s) acting in thick ascending limb of the loop of Henle
3. Determine diuretic(s) acting in the distal convoluted tubule:
4. Determine diuretic(s) acting in the collecting tubules:
5. Determine osmotic diuretic(s):
6. Determine diuretic agent that acts by competing with aldosterone for its cytosolic receptors:
7. Determine diuretic(s) that inhibit carbonic anhydrase:
8. Determine diuretic(s) that promote osmotic diuresis:
9. Determine noncompetitive aldosterone antagonist(s):
10. Determine very potent diuretic(s) (10-35% glomerular filtrate in the urine)
11. Determine moderately potent diuretic(s) (5-10% glomerular filtrate in the urine).
12. Determine weak diuretic(s) (low efficacy) (5% of the glomerular filtrate in the urine)
13. Determine fast and short acting diuretic(s):
14. Determine diuretic(s) of medium duration of action:
15. Determine the mechanism(s) of action of osmotic diuretics
16. Determine the indication(s) for osmotic diuretics
17. Determine the side effect(s) of osmotic diuretics
18. Determine the contraindication(s) of osmotic diuretics
19. Determine the mechanism of action of loop diuretics
20. Determine the effect(s) of loop diuretics
21. Determine the indication(s) for loop diuretics
22. Determine the side effect(s) of loop diuretics
23. Determine the mechanism of action of thiazide and thiazide-like diuretics
24. Determine the effect(s) of thiazide and thiazide-like diuretics
25. Determine the indication(s) for thiazide and thiazide-like diuretics
26. Determine the side effect(s) of thiazide and thiazide-like diuretics
27. Determine the mechanism of action of spironolactone
28. Determine the effect(s) of competitive aldosterone antagonists
29. Determine the indication(s) of spironolactone
30. Determine the side effect(s) of spironolactone
31. Determine antigout drug(s)
32. Determine the mechanism of action and effects of colchicine
33. Determine the side effect(s) of colchicine
34. Determine the mechanism of action and effects of allopurinol
35. Determine medicine(s) used in urolithiasis
36. Determine the group(s) of plasma volume expanders
37. Determine the effect(s) of dextrans
38. Determine the indication(s) of the human albumin
39. Determine the side effect(s) of the human albumin
40. Determine the indication(s) of sodium bicarbonate
41. Determine the indication(s) of L-arginine hydrochloride

Drugs affecting the gastro-intestinal functions

1. Determine preparation(s) of pancreatic enzymes
2. Determine the indication(s) for pancreatic enzyme preparations
3. Determine the group(s) of drugs used in gastric ulcer disease
4. Determine H₂-histaminoblocker(s)
5. Determine the mechanism of action of H₂-histaminoblockers
6. Determine the indications for H₂-histaminoblockers
7. Determine the side effects of H₂-histaminoblockers
8. Determine the mechanism of action of proton pump inhibitors
9. Determine proton pump inhibitor(s)
10. Determine the indication(s) for proton pump inhibitors
11. Determine the side effect(s) of proton pump inhibitors
12. Determine the indication(s) for prostaglandin analogues
13. Determine systemic antacid(s)
14. Determine non-systemic antacid(s)
15. Determine the side effect(s) of systemic antacids
16. Determine the side effect(s) of non-systemic antacids
17. Determine prokinetic(s)
18. Determine the mechanism of action of metoclopramide
19. Determine the indication(s) of prokinetics
20. Determine antiemetic agent(s)
21. Determine the mechanisms of action of antiemetic drugs
22. Determine the indication(s) of antiemetic drugs
23. Determine antifatulent(s)
24. Determine bulk (volume) laxative(s)
25. Determine the mechanisms of action of bulk (volume) laxatives
26. Determine the indication(s) for bulk (volume) laxatives
27. Determine osmotic purgative(s)
28. Determine the indication(s) for osmotic purgatives
29. Determine irritating (stimulant) purgative(s)
30. Determine the mechanisms of action of irritating (stimulant) purgatives
31. Determine the indication(s) for irritating (stimulant) purgatives
32. Determine spasmolytic(s)
33. Determine the antidiarrheal drug(s)
34. Determine the mechanisms of action of antidiarrheals
35. Determine the hepatoprotective(s)
36. Determine the mechanisms of action of hepatoprotectors
37. Determine the choleric drug(s)

CHEMOTHERAPEUTIC PREPARATIONS

Antibiotics

1. Select group(s) of beta-lactam antibiotics
2. Select beta-lactamase inhibitor(s)
3. Select the mechanism(s) of action of antibiotics beta-lactams
4. Select biosynthetic penicillin(s)
5. Select the spectrum of action of biosynthetic penicillin(s)
6. Select side effect(s) of penicillins
7. Choose the correct association between the cephalosporins and their generations:

8. Select carbapenem antibiotic(s)
9. Select the spectrum of action of carbapenems
10. Select monobactam(s)
11. Select the spectrum of action of monobactams
12. Choose the correct association between aminoglycosides and their generations:
13. Select the spectrum of action of aminoglycosides
14. Select the mechanism of action of aminoglycosides
15. Select the side effect(s) of aminoglycosides
16. Select macrolide(s)
17. Select the spectrum of action of macrolides
18. Select the mechanism of action of the macrolides
19. Select the indication(s) of the macrolides
20. Select lincosamide(s)
21. Select the mechanism of action of the lincosamides
22. Select the indication(s) for lincosamides
23. Select tetracycline(s)
24. Select the spectrum of action of tetracyclines
25. Select the indication(s) for tetracyclines
26. Select the side effects of tetracyclines
27. Select the antibiotic(s) from amphenicols derivatives group
28. Select the spectrum of action of the antibiotics from amphenicol derivatives group
29. Select the mechanism of action of antibiotics from amphenicol derivatives group
30. Select the side effects of antibiotics from amphenicol derivatives group
31. Select glycopeptide antibiotic(s)
32. Select the spectrum of action of glycopeptide antibiotics
33. Select the mechanism of action of glycopeptide antibiotics
34. Select the indication(s) for glycopeptide antibiotics
35. Select the side effect(s) of glycopeptide antibiotics
36. Select the mechanism of action of polymyxins
37. Select the spectrum of action of polymyxins
38. Select the side effect(s) of polymyxins
39. Select ansamycin antibiotic(s)
40. Select the mechanism of action of ansamycins
41. Select the indication(s) of ansamycins

Antibacterial sulphonamides. Antibacterial substances with diverse chemical structures.

1. Select systemic antibacterial sulphonamide(s)
2. Select sulphonamide(s) with intestinal action
3. Select sulphonamide(s) with local action
4. Determine the spectrum of action of antibacterial sulphonamides
5. Determine the indication(s) for antibacterial sulphonamides
6. Determine the side effect(s) of antibacterial sulphonamides
7. Determine the combined systemic antibacterial sulphonamide(s)
8. Determine the mechanism of action of combined systemic antibacterial sulphonamides
9. Select nitrofurantoin derivative(s)
10. Select the spectrum of action of nitrofurantoin derivatives
11. Determine the mechanism of action of nitrofurantoin derivatives
12. Determine the indication(s) of nitrofurantoin derivatives
13. Determine the side effect(s) of nitrofurantoin derivatives

14. Determine the non-fluorinated quinolone(s)
15. Indicate the mechanism of action of non-fluorinated quinolones
16. Indicate the spectrum of action of non-fluorinated quinolones
17. Choose indication(s) for non-fluorinated quinolones
18. Select fluoroquinolone(s)
19. Select the mechanism(s) of action of fluoroquinolones
20. Select the spectrum of action of fluoroquinolones
21. Select the indication(s) for fluoroquinolones
22. Choose the side effect(s) of fluoroquinolones
23. Determine nitroimidazole derivative(s)
24. Select the mechanism of action of nitroimidazole derivatives
25. Select the spectrum of action of nitroimidazole derivatives
26. Select the indication(s) for nitroimidazole derivatives
27. Determine the side effect(s) of nitroimidazole derivatives
28. Choose oxazolidinone derivative(s)
29. Determine the mechanism(s) of action of oxazolidinones
30. Determine the spectrum of action of oxazolidinones
31. Determine the indication(s) for oxazolidinones
32. Choose 8-oxyquinoline derivative(s)
33. Indicate the spectrum of action of 8-oxyquinoline derivatives with systemic action
34. Indicate the mechanism of action of 8-oxyquinoline derivatives with systemic action

Antituberculous, antileprosy drugs. Antispirochetosis. Antihemintic agents.

1. Determine the antituberculous drug(s)
2. Select the mechanism(s) of action of antituberculous drugs
3. Select the side effects of antituberculous drugs
4. Determine anti-leprosy drug(s)
5. Select the mechanisms of action of anti-leprosy drugs
6. Select drug(s) used in malaria
7. Select the preparation(s) used in amoebiasis
8. Select the preparation(s) used in trichomoniasis
9. Select the preparation(s) used in lambliosis
10. Select the drug(s) used in toxoplasmosis
11. Select the mechanism(s) of action of preparations used in toxoplasmosis
12. Select the preparation(s) used in trypanosomiasis
13. Select the preparations used in pneumocystosis
14. Determine the preparation(s) used in intestinal nematodosis
15. Determine the mechanisms of action of drugs used in the treatment of intestinal nematodes
16. Determine the preparation(s) used in intestinal cestodes
17. Determine the mechanisms of action of preparations used in the treatment of intestinal cestodes
18. Determine the preparation(s) used in extraintestinal helminthiasis
19. Determine the mechanism(s) of action of preparations used in the treatment of extraintestinal helminthiasis
20. Select the preparation(s) used in the treatment of infections caused by spirochetes

Antiviral. Antifungal.

1. Choose antiviral(s) active against influenza viruses

2. Select the mechanisms of action of anti-influenza drugs
3. Select the indication(s) for anti-influenza drugs
4. Select the mechanism(s) of action of antiherpetic drugs
5. Select antiviral antiherpes drug(s)
6. Select antiviral antiretroviral drug(s)
7. Select the mechanism(s) of action of antiretroviral drugs
8. Select the indication(s) for antiretroviral antivirals
9. Select antiviral drug(s) used in viral hepatitis B.
10. Select the mechanism(s) of action of interferons
11. Select the indication(s) of interferon drugs
12. Select the antiviral drug(s) used in viral hepatitis C.
13. Select antiviral drug(s) used in the papillomaviruses infections
14. Select medicine(s) used in COVID-19
15. Select antifungal(s) used in systemic mycoses
16. Select antifungal(s) used in dermatomycoses
17. Determine the mechanism(s) of action of antifungals
18. Determine the side effect(s) of antifungals
19. Determine the spectrum of action of antifungals
20. Determine the mechanism(s) of action of echinocandins
21. Determine the spectrum of action of echinocandins

ANTI-INFLAMMATORY, ANTIALLERGIC, HORMONAL

Anti-inflammatory medication.

1. Determine non-selective non-steroidal anti-inflammatory drug(s)
2. Determine selective COX-2 inhibitor(s)
3. Determine the effect(s) of nonsteroidal anti-inflammatory drugs
4. Determine the mechanism(s) of action of nonsteroidal anti-inflammatory drugs
5. Determine the indication(s) for non-steroidal anti-inflammatory drugs
6. Determine the side effect(s) of nonsteroidal anti-inflammatory drugs
7. Determine the mechanism(s) of action of steroidal anti-inflammatory drugs
8. Determine the indication(s) of steroidal anti-inflammatory drugs
9. Determine disease modifying antirheumatic drug(s)
10. Determine mechanism(s) of action of disease modifying antirheumatic drugs
11. Determine the indication(s) of disease modifying antirheumatic drugs

Antiallergic medication and drugs with influence on immune processes.

1. Determine the group(s) and antiallergic drugs that inhibit the release of mediators
2. Determine H1- antihistamine(s) from generation I
3. Determine H1- antihistamine(s) from generation II
4. Determine H1- antihistamine(s) from generation III
5. Determine the effect(s) of H1-antihistamines from generation I
6. Determine the indication(s) of H1-antihistamines
7. Determine the side effect(s) of H1-antihistamines from generation I
8. Determine the side effect(s) of H1-antihistamines from generation II
9. Determine the effect(s) of glucocorticoids as antiallergics
10. Determine the indication(s) for glucocorticoids as antiallergics
11. Determine the antileukotriene(s) agent(s)
12. Determine the mechanism(s) of mast cell degranulation inhibitors
13. Determine the indication(s) of mast cell degranulation inhibitors
14. Determine immunomodulatory drug(s) of bacterial origin

HORMONAL PREPARATIONS

1. Determine the hormonal preparation(s) of the hypothalamus
2. Determine the hormonal preparation(s) of hypophysis
3. Determine the mechanism(s) of action of hormonal preparations of the thyroid gland
4. Determine the indication(s) for hormonal preparations of the thyroid gland
5. Determine the side effect(s) of hormonal preparations of the thyroid gland
6. Determine antithyroid preparation(s)
7. Determine the mechanisms of action of antithyroid drugs
8. Determine the indication(s) for thioamide antithyroid drugs
9. Determine the indications for iodide preparations as antithyroid drugs
10. Determine the sulfonylurea(s) oral antidiabetic(s)
11. Determine the DPP-IV inhibitor(s) oral antidiabetic(s)
12. Determine the meglitinide antidiabetic agent(s)
13. Determine the GLP-1 agonist(s) oral antidiabetic(s)
14. Determine the tetrasaccharide(s) (α -Glucosidase inhibitors) oral antidiabetic(s)
15. Determine the group(s) of oral antidiabetics that promote release of insulin
16. Determine the group(s) of oral antidiabetics that increase sensitivity to insulin
17. Determine the oral antidiabetic(s) that inhibit carbohydrate absorption
18. Determine the oral antidiabetic(s) that promote glucose utilization
19. Determine the effect(s) of insulin preparations on carbohydrate metabolism
20. Determine the biphasic human insulin preparation(s)
21. Determine the ultra-rapid and ultra-short insulin preparation(s)
22. Determine the basal human insulin preparation(s)
23. Determine the mechanisms of action of insulin preparation(s)
24. Determine the side effects of insulin preparation(s)
25. Determine the absolute and relative indications of insulin preparation(s)
26. Determine the mechanism(s) of action of biguanides
27. Determine the indication(s) for biguanides
28. Determine the mechanism(s) of action of sulfonylureas
29. Determine the mechanism(s) of action of DPP-IV inhibitors
30. Determine the mechanism(s) of action of GLP-1 receptor agonists
31. Determine the mechanism(s) of action of tetrasaccharides (α -Glucosidase inhibitors)
32. Determine the mechanism(s) of action of meglitinides
33. Determine the mechanism(s) of action of thiazolidinediones
34. Determine the mechanism(s) of action of aldoreductase inhibitors
35. Determine the glucocorticoid(s) for intravenous administration
36. Determine the glucocorticoid(s) for inhalation
37. Determine the glucocorticoid(s) according to their potency
38. Determine the glucocorticoid(s) according to the main actions - anti-inflammatory and mineralocorticoid
39. Determine the mechanism(s) of action of glucocorticoids
40. Determine the effect(s) of glucocorticoids
41. Determine the indication(s) for glucocorticoids
42. Determine the side effect(s) of glucocorticoids
43. Determine the effect(s) of mineralocorticoids
44. Determine the estrogen preparation(s)
45. Determine the indication(s) for estrogen preparations
46. Determine the preparation(s) of semisynthetic progestins

47. Determine the effect(s) of progesteron preparations
48. Determine the preparation(s) of semisynthetic androgens
49. Determine the indication(s) for androgen preparations
50. Determine the vaginal contraceptive(s)
51. Determine the contraceptive preparation(s) - subcutaneous implant(s)