

# Portal:Exam Topics in Pharmacology (3. LF UK)

## General

1. Drugs - drug names, drug regulation, FDA, SPC
2. Routes of drug administration, first-pass effect
3. Absorption of drugs, bioavailability
4. Distribution of drugs, volume of distribution
5. Drug biotransformation, enzyme induction
6. Elimination of drugs, excretion of drugs, enterohepatic circulation
7. Pharmacokinetic variables: volume of distribution, clearance, half-life
8. Clinical relevance of pharmacokinetic variables: half-life, volume of distribution, clearance
9. Transfer of drugs across membranes
10. Major sites of action of drugs: receptors, enzymes, ion channels, transporters
11. Drug- receptor interactions: drug agonists, antagonists
12. Ligand-gated channels, G proteins, second messengers
13. Relation between drug dose & response, LD50, ED50, therapeutic index
14. Half-life and the time required to reach steady state after a repeated administration
15. Tolerance, tachyphylaxis
16. Drug interactions
17. Drug allergy, anaphylactic shock, bronchospasm, skin reactions
18. Teratogenic effects of drugs
19. Prescribing for the elderly, dosage in children
20. Adverse drug reactions, serious ADRs, reporting ADRs
21. Pre-clinical evaluation of new drugs
22. Clinical evaluation of new drugs
23. Therapeutic drug monitoring (TDM). Sources of drug information

## Drug groups

1. Antihypertensive agents
2. Diuretics
3. Beta-adrenergic antagonists (beta-blockers)
4. Calcium channel blockers
5. ACE inhibitors and angiotensin II inhibitors
6. Centrally acting antihypertensive agents, alfa -adrenoceptor-blocking agents
7. Drugs used to treat angina pectoris
8. Nitrates
9. Vasodilators
10. Positive inotropic drugs and sympathomimetic drugs used in the treatment of cardiovascular disorders
11. Positive inotropic drugs
12. drugs
13. Antihistamines
14. Ergot alkaloids
15. Polypeptides
16. Eicosanoids, prostaglandins
17. Drugs used in asthma
18. Bronchodilators
19. Expectorants
20. Anxiolytic
21. Anxiolytic agents
22. Benzodiazepines
23. Sedative-hypnotics
24. Ethanol
25. Antiepileptic drugs
26. General anesthetics
27. Local anesthetics
28. Skeletal muscle relaxants
29. Drugs for Parkinson's disease
30. Antipsychotic agents (neuroleptics)
31. Phenothiazines
32. Lithium
33. Antidepressant agents
34. Opioid analgesics & antagonists
35. Nonopioid analgesics
36. Antimigraine drugs
37. Drugs of abuse
38. Agents used in anemias
39. Anticoagulant drugs & their antagonists

40. Fibrinolytic drugs, antiplatelet drugs
41. Agents used in hyperlipidemia . Plasma substitutes,
42. Non-steroidal antiinflammatory drugs
43. Drugs used in gout
44. Hypothalamic & pituitary hormones
45. Thyroid & antithyroid drugs
46. Corticosteroids
47. Gonadal hormones & inhibitors
48. Contraceptives
49. Pancreatic hormones & antidiabetic drugs
50. Drugs affecting bone metabolism
51. Penicillins
52. Basic penicillins
53. Broad spectrum penicillins
54. Cephalosporins
55. Antibiotics against Staphylococcus
56. Tetracyclines
57. Aminoglycosides
58. Macrolides
59. Antimycobacterial drugs
60. Sulfonamides and trimethoprim
61. Antifungal agents
62. Chemotherapy of urinary tract infections
63. Treatment of trichomoniasis, Antimalarial agents
64. Antiviral agents
65. Anthelmintic drugs , ectoparasiticides
66. Cancer chemotherapy
67. Immunosuppressive and immunomodulating agents
68. Chelators
69. Drugs used in glaucoma therapy
70. Dermatologic agents
71. Drugs used in rhino- and laryngology
72. Drugs used in dermatology
73. Drugs used in the treatment for acne
74. Topical corticosteroids
75. Drugs used in gastrointestinal disease
76. Drugs used in acid-peptic disease
77. Antiemetics
78. Laxatives
79. Antidiarrheal agents
80. Spasmolytic agents and spasmolytics
81. Vitamins
82. Disinfectants and antiseptics
83. Calcium, magnesium, potassium, sodium, Fluor
84. Homeopathy
85. Drugs used in the obesity treatment
86. Uterotonics, tocolytic agents
87. Specific antidotes used in management of the poisoned patient