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**CLINICAL PHARMACOLOGY EXAMINATION SYLLABUS**

1. Clinical pharmacology (CP) as a science and university subject. Methods of CP.
2. CP trials – definition and types.
3. Specific problems in evaluation drug efficacy.
4. Ethic considerations in clinical trials implementation. Informed consent. Good clinical practice.
5. Phases in the clinical examination of a new drug.
6. Evidence-based drug therapy (EBDT). Drug efficacy according to EBDT.
7. Evidence-based medicine (EBM). Paces towards EBM. Criteria of reliability of data related to drug efficacy.
8. Pharmacoeconomics. Types of therapy costs. Levels of pharmacoeconomic evaluation of therapy costs.
9. Methods of pharmacoeconomic analysis.
10. Clinical pharmacokinetics (CPK) – general considerations.
11. Bioavailability and bioequivalence.
12. CPK parameters. Clinical impact.
13. Drug accumulation. Types of dosing regimens. Components of a rational dosing regimen.
14. Therapeutic drug monitoring.
15. Clinical pharmacodynamics. Factors affecting drug effects.
16. Evaluation of drug therapeutic efficacy.
17. Drug therapy during pregnancy – aspects related to the fetus.
18. Drug therapy during pregnancy – aspects related to the pregnant woman.
19. Drug therapy in breast feeding.
20. Drug therapy in children.
21. Drug therapy in the elderly.
22. Drug therapy in patients with chronic renal disease.
23. Drug therapy in patients with chronic liver disease.
24. Drug therapy in patients with chronic cardiovascular disease.
25. Adverse drug reactions (ADR). Types of ADR.
26. Allergic ADR.
27. Approaches for studying ADR.
28. Drug therapy in drivers. Drug-induced changes in blood tests results.
29. The clinicopharmacological impact of food, tobacco and alcohol.
30. Clinical chronopharmacology.
31. Variations in drug metabolism due to genetic polymorhism (pharmacokinetic).
32. Variations in drug response due to genetic polymorhism (pharmacodynamic).
33. Principles of rational drug choices in pharmacotherapy. The concept of a personal drug (P-drug).
34. Pharmacotherapy of arterial hypertension.
35. Pharmacotherapy of coronary heart disease.
36. Pharmacotherapy of thrombosis.
37. Pharmacotherapy of heart failure.
38. Pharmacotherapy of diabetes mellitus.
39. Pharmacotherapy of bronchial asthma.
40. Pharmacotherapy of peptic ulcer disease.
41. Pharmacotherapy of pain.
42. Pharmacotherapy of osteoporosis.
43. Principles of pharmacotherapy with glucocorticosteroids.
44. Algorithm in choosing antibacterial drugs.
45. Pharmacotherapy of community acquired pneumonia.
46. Pharmacotherapy of urinary tract infections.

**Recommended reading:**

1. A Textbook of Clinical Pharmacology and Therapeutics. Eds. J.M. Ritter, L. Lewis, T. Mant, A. Ferro. Edward Arnold, 2008, 5rd Edition.
2. Clinical Pharmacology and Therapeutics (Lecture Notes). McKay G.A., Reid J.L., Walters M.R. Wiley-Blackwell, 2010. 8th edition.
3. Pharmacotherapy Handbook, Wells B.G., DiPiro J.T., Schwinghammer T.L., DiPiro C.V., McGraw Hill Medical, 2012, 8th Edition
4. Basic and Clinical Pharmacology, Katzung, Masters, Trevor, LANGE Basic Science, 11th Edition.