

**Thematic plan of lectures
in the discipline "Clinical Immunology and Allergology"
for 5th year students of the faculty of foreign students
specialty 1-79 01 01 "General Medicine"**

*The thematic plan was approved at a meeting of the Department of Clinical Laboratory
Diagnostics, Allergology and Immunology (Minutes No. 8 dated 31.08.2024)*

Наименование тем, содержание лекции
Topic 1. Immunological deficiency. 1. Immunological deficiency - definition, classification. 2. Primary immunodeficiencies. Formation mechanism. Clinical manifestations, 3. General approaches to the diagnosis of immunodeficiency states. 4. Treatment of patients with primary immunodeficiency. 5. Immune deficiency due to acquired immunodeficiency (causes, laboratory diagnostics).
Topic 2. Mechanisms of autoimmunization and pathogenesis of autoimmune disorders. Immunological markers of autoimmune diseases (AID). 1. Mechanisms of central and peripheral tolerance to own tissues. Mechanisms of "breakdown" of self-tolerance. 2. Classification of autoimmune diseases. Etiopathogenetic factors of autoimmune disorders. 3. Mechanisms of tissue damage. 4. Organ-specific and organ-specific AID.
Topic 3. Immune mechanisms in the regulation of reproduction. Immunology of cancer. 1. Immune relationships in the mother-fetus system. Changes in systemic immunity in the normal course and pathology of pregnancy. 2. Immunological causes of infertility. Laboratory immunological monitoring of reproductive pathology. 3. The importance of autoimmune disorders and infections in intrauterine growth disorders. 4. Antiphospholipid syndrome in the pathogenesis of spontaneous abortion. Diagnostic and treatment protocols. Immunological mechanisms of hemolytic disease of newborns. Diagnostics and treatment. 5. Tumor antigens. Tests for revealing. Immune surveillance and resistance mechanisms for tumor elimination. Immunodeficiency and tumor. 6. Aspects of tumors immunodiagnostic. Specific and nonspecific immunotherapy of cancer
Topic 4. Modern methods of diagnosis and treatment of allergic diseases. 1. Epidemiology of allergic diseases in the Republic of Belarus. Organization of the allergological service in the republic. 2. Structure, origin, classification of allergens: Etiopathogenesis of allergic diseases. Medicinal, food, household, infectious allergies. 3. Peculiarities of examination of patients with allergic pathology. Skin tests. Provocative tests. Elimination tests. 4. Methods of allergy diagnostics in vitro. Comparative efficacy and clinical relevance. 5. General principles of specific and nonspecific therapy of allergic diseases.
Topic 5. Drug allergy. Anaphylaxis and anaphylactoid reactions shock. Food allergy. Pollen allergy. 1. Food allergy. The most common food allergens, mechanisms, factors of predisposition. Signs and symptoms. Diagnostic and therapeutic decision strategies. 2. Drug allergy. Adverse reactions to drugs (drugs intolerance, idiosyncratic drug reactions, immunological drug reactions). 3. Anaphylaxis and anaphylactoid reactions and shock. Causes of anaphylaxis and trigger factors, immunological mechanisms, clinical manifestations of anaphylaxis. 4. Rapid recognition and general management of anaphylaxis. Initial (acute) anaphylaxis treatment. Long term management of anaphylaxis.