№ЛД-21ИН

Federal State Budgetary Educational Institution of Higher Education "North-Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3

APPROVED
by the minutes of the meeting
of the Central Coordinating
Educational and Methodological Council
"23" May 2023 № 5

THE EVALUATION MATERIALS

on the discipline of Clinical immunology

the main professional educational program of higher education is the specialty program in the specialty 31.05.01 General Medicine, partially implemented in English, approved on 24.05.2023.

for students of the Faculty of Medicine 3th year

by specialty 31.05.01 General Medicine

Reviewed and approved at the meeting of the Department
dated February 03, 2021. (Protocol № 3)

Head of the Department, MD. _____ Bestaev D. V.

Vladikavkaz, 2023

STRUCTURE OF THE APPRAISAL FUND

1. Title page
2. The structure of the appraisal fund
3. Review of the appraisal fund
4.Passport of evaluation tools
5.Set of evaluation tools:
- a bank of situational tasks/practical tasks/business games
- standards of test tasks (with title page and table of contents),
- examination tickets /test tickets

ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ «СЕВЕРО-ОСЕТИНСКАЯ ГОСУДАРСТВЕННАЯ МЕДИЦИНСКАЯ АКАДЕМИЯ» МИНИСТЕРСТВА ЗДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ

РЕЦЕНЗИЯ

на оценочные материалы

по дисциплине «Клиническая иммунология» образовательная программа, частично реализуемая на английском языке

для лечебного факультета **3 курс**

по специальности 31.05.01 Лечебное дело

Оценочные материалы составлены на кафедре **внутренних болезней № 3**

на основании рабочей программы дисциплины **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке**, утвержденная 24.05.2023 г. и соответствуют требованиям ФГОС 3++ «Лечебное дело»

Оценочные материалы включает в себя:

- вопросы к модулю,
- банк ситуационных задач/практических заданий/деловых игр,
- эталоны тестовых заданий (с титульным листом и оглавлением),
- экзаменационные билеты к зачету

Банк тестовых заданий включает в себя следующие элементы: тестовые задания, варианты тестовых заданий, шаблоны ответов. Все задания соответствуют рабочей программе **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке** и охватывают все её разделы. Сложность заданий варьируется. Количество заданий по каждому разделу дисциплины достаточно для проведения контроля знаний и исключает многократное повторение одного и того же вопроса в различных вариантах. Банк содержит ответы ко всем тестовым заданиям и задачам.

Количество экзаменационных билетов достаточно для проведения экзамена и исключает неоднократное использование одного и того же билета во время экзамена в одной академической группе в один день. Экзаменационные билеты выполнены на бланках единого образца по стандартной форме, на бумаге одного цвета и качества. Экзаменационный билет включает в себя 2 вопроса. Формулировки вопросов совпадают с формулировками перечня вопросов, выносимых на экзамен. Содержание вопросов одного билета относится к различным разделам программы, позволяющее более полно охватить материал учебной дисциплины.

Дополнительно к теоретическим вопросам предлагается банк ситуационных задач (анализы, рецепты, рентгенограммы, электрокардиограммы и т.д.)/ практических заданий/ деловых игр. Ситуационные задачи (и др.) дают возможность объективно оценить уровень усвоения обучающимся теоретического материала при текущем контроле успеваемости, промежуточной аттестации. Сложность вопросов в экзаменационных билетах распределена равномерно.

Замечаний к рецензируемым оценочным материалам нет.

В целом, оценочные материалы по дисциплине **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке** способствуют качественной оценке уровня владения обучающимися общекультурными и профессиональными компетенциями.

Рецензируемые оценочные материалы по дисциплине **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке** могут быть рекомендованы к использованию для текущей и промежуточной аттестации на лечебном факультете у обучающихся 3 курса.

Рецензент:

Главный врач ГБУЗ «Поликлиника №1»
РСО-Алания

З.В. Мецаева

ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ «СЕВЕРО-ОСЕТИНСКАЯ ГОСУДАРСТВЕННАЯ МЕДИЦИНСКАЯ АКАДЕМИЯ» МИНИСТЕРСТВА ЗДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ

РЕЦЕНЗИЯ

на оценочные материалы

по дисциплине **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке**

для лечебного факультета **3 курс**

по специальности 31.05.01 Лечебное дело

Оценочные материалы составлены на кафедре **внутренних болезней № 3**

на основании рабочей программы дисциплины **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке**, утвержденная 24.05.2023 г. и соответствуют требованиям ФГОС 3++ «Лечебное дело»

Оценочные материалы включает в себя:

- вопросы к модулю,
- банк ситуационных задач/практических заданий/деловых игр,
- эталоны тестовых заданий (с титульным листом и оглавлением),
- экзаменационные билеты к зачету

Банк тестовых заданий включает в себя следующие элементы: тестовые задания, варианты тестовых заданий, шаблоны ответов. Все задания соответствуют рабочей программе **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке** и охватывают все её разделы. Сложность заданий варьируется. Количество заданий по каждому разделу дисциплины достаточно для проведения контроля знаний и исключает многократное повторение одного и того же вопроса в различных вариантах. Банк содержит ответы ко всем тестовым заданиям и задачам.

Количество экзаменационных билетов достаточно для проведения экзамена и исключает неоднократное использование одного и того же билета во время экзамена в одной академической группе в один день. Экзаменационные билеты выполнены на бланках единого образца по стандартной форме, на бумаге одного цвета и качества. Экзаменационный билет включает в себя 2 вопроса. Формулировки вопросов совпадают с формулировками перечня вопросов, выносимых на экзамен. Содержание вопросов одного билета относится к различным разделам программы, позволяющее более полно охватить материал учебной дисциплины.

Дополнительно к теоретическим вопросам предлагается банк ситуационных задач (анализы, рецепты, рентгенограммы, электрокардиограммы и т.д.)/ практических заданий/ деловых игр. Ситуационные задачи (и др.) дают возможность объективно оценить уровень усвоения обучающимся теоретического материала при текущем контроле успеваемости, промежуточной аттестации. Сложность вопросов в экзаменационных билетах распределена равномерно.

Замечаний к рецензируемым оценочным материалам нет.

В целом, оценочные материалы по дисциплине **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке** способствуют качественной оценке уровня владения обучающимися общекультурными и профессиональными компетенциями.

Рецензируемые оценочные материалы по дисциплине **«Клиническая иммунология» образовательная программа, частично реализуемая на английском языке** могут быть рекомендованы к использованию для текущей и промежуточной аттестации на лечебном факультете у обучающихся 3 курса.

Рецензент:

Председатель ЦУМК
естественно-научных и математических дисциплин
с подкомиссией экспертизы оценочных материалов,
доцент кафедры химии и физики Н.И. Боциева

ВЕРНО: специалист по кадрам отдела кадров и документооборота ФГБОУ ВО СОГМА Минздрава России
____ _____ 20 ___ г.

ОТДЕЛ КАДРОВ И ДОКУМЕНТООБОРОТА

Passport of the evaluation materials for
the discipline Clinical immunology, partially implemented in English

№i/o	Name of the supervised section (topic) of the discipline/module	Name of the supervised section (topic) of the discipline/module	Name of the evaluation tool
1	2	3	4
Type of control	**Current/Intermediate**		
1.	Immunology. Definition of clinical immunology, subject, tasks. Methods of studying the immune status and principles of its assessment. Immunodeficiency diseases. Immunodeficiency of genetic origin (primary). Secondary (acquired) immunodeficiency. Definition, characteristics, pathogenetic mechanisms of development, diagnosis, clinical manifestations, treatment approaches.	EPC-4 EPC -5 EPC 6	test control, questions for the module, a bank of situational tasks, tickets for the test.
2.	Allergology. Diagnosis and treatment of allergic diseases.	EPC-4 EPC -5 EPC 6	test control, questions for the module, a bank of situational tasks, tickets for the test.
6	Immunotherapy. Immunocorrection. Allergen-specific immunotherapy.	EPC-4 EPC -5 EPC 6	test control, questions for the module, a bank of situational tasks, tickets for the test.

*The name of the supervised section (topic) or topics (sections) of the discipline/ module is taken from the work program.

Questions about the module 1

1. Structural and functional organization of the immune system. Immune status.
2. Immunodeficiency of genetic origin (primary), classification, basic forms. Principles of diagnosis and treatment.
3. Secondary (acquired) immunodeficiency, definition, clinical manifestations, diagnosis, treatment approaches.
4. Autoimmune disorders. Systemic lupus erythematosus (SLE), immunopathogenesis, immunodiagnostics, immunocorrection.
5. Rheumatoid arthritis, immunopathology, immunodiagnostics, immunocorrection.
6. Autoimmune disorders (malignant myasthenia gravis, autoimmune thyroiditis).
7. Infections of the immune system. Human immunodeficiency virus (HIV). Epstein-Barr viruses, herpes simplex, cytomegalovirus and other pathogens

Questions about the module 2

1. Allergy. Types of allergens. Pathogenetic classifications of allergy according to A.D. Ado and according to Jell and Coombs.
2. Allergy. Principles of diagnosis of allergic diseases.
3. Bronchial asthma, classification, etiology and pathogenesis (immunopathogenesis) of the main forms of bronchial asthma. Diagnostics.
4. Pollinosis. Allergic rhinitis. Diagnostics. Differential diagnosis.
5. Atopic dermatitis, clinical forms, differential diagnosis. Food allergy. Clinical forms of food allergy. Diagnostics.
6. Urticaria and Quincke's edema. Classification, allergens. Clinical picture. Differential diagnosis with hereditary angioedema.
7. Drug allergy. Anaphylactic shock. Etiology, pathogenesis. Clinical picture. Diagnosis. Treatment and prevention. Emergency measures for systemic anaphylaxis.
8. Acute toxic-allergic reactions (erythema multiforme, Stevens-Johnson syndrome, Lyell syndrome).
9. Principles of treatment of allergy patients. Rehabilitation of allergy patients.

Questions about the module 3

1. Principles of immunotropic therapy.
2. Substitution therapy.
3. Immunosuppressive therapy.
4. Immunostimulating therapy.
5. Vaccination

The list of questions for the preparation of students of the Faculty of Medicine for the test in the discipline "CLINICAL IMMUNOLOGY, PARTIALLY IMPLEMENTED IN ENGLISH "

1. Determination of allergy. Types of allergic reactions. Stages of allergic reactions. Mediators of allergic reactions.
2. The main types of allergens: pollen, household, epidermal, insect, food, infectious. Ways of sensitization by allergens.
3. Principles of diagnosis of allergic diseases. Specific diagnostics of allergic diseases aimed at identifying an allergen or a group of allergens that can provoke the development of an allergic disease.
4. Pollinosis, the concept. The flowering seasons of allergenic plants.Cross-allergy.
5. Allergic reactions. Etiology, classification. The mechanism of development. Provoking factors.
6. Diagnosis of allergic reactions. Principles of treatment and prevention of allergic reactions.
7. BA. Classification: forms of BA, according to the severity of the course, the phase of the disease. Diagnosis of BA. Differential diagnosis of various forms of BA. Treatment of BA. Indications for hospitalization. Non-drug treatment. Medical treatment: Relief of seizures. Relief of exacerbation.
8. Urticaria. Etiology, pathogenesis, classification. Diagnosis of urticaria: physical diagnosis, laboratory tests, special tests, differential diagnosis. Treatment of urticaria, treatment goals, indications for hospitalization, non-drug therapy, drug therapy.
9. Angioedema. Classification. Diagnosis of edema, differential diagnosis. Treatment during exacerbation and remission.
10. Epidemiology of drug allergy. Risk factors for the development of drug allergy.
11. Drug allergy. Diagnostics. Treatment. Prevention.
12. Anaphylactic shock. Clinic of mild, moderate and severe shock. Clinical variants of AS. Treatment. Medicinal and non-medicinal measures. Prevention of AS.
13. Causes of food allergy. Risk factors for the development of food allergies.

14. Modern ideas about the mechanisms of food allergies.
15. Food allergy (the most important food allergens, features of food allergies in children and adults), clinic, diagnosis, treatment and prevention.
16. Stevens-Johnson syndrome, Lyell syndrome. Clinic. Principles of treatment.
17. Primary immunodeficiency, clinical manifestations.
18. Principles of immunotherapy.
19. Risk factors for the development of secondary immunodeficiency conditions.
20. Systemic lupus erythematosus, diagnostic criteria.
21. Rheumatoid arthritis, diagnostic criteria.

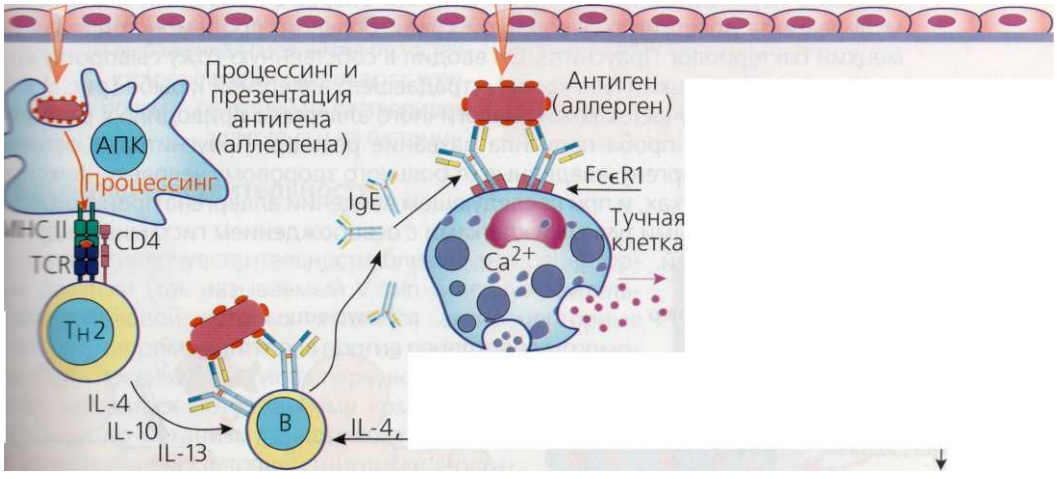
Federal State Budgetary Educational Institution
of Higher Education "North-Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3
Faculty Medical **Course 3**
Discipline Clinical immunology, partially implemented in English

Practical task № 1

1. *Add what you missed.*
Depending on the mechanism of development, there are 5 types of allergic reactions.
Type 1 - reagin.
Type 2 is cytotoxic.
Type 3 - immunocomplex
Type 4 - delayed reactions

2.*Use the drawing to draw up a diagram of the development of an allergic reaction of the immediate type*



Allergic reactions of the first type. At the first contact with the allergen, IGES to the allergen are produced, i.e. sensitization to this allergen develops. Upon repeated contact with the allergen, the allergen binds to the IgE, mast cells are activated and mediators of allergic inflammation, primarily histamine, are released through its walls, and clinical symptoms of allergy develop.

3. *The following diseases are distributed taking into account the immune mechanism of their development. Note which type of allergic reactions (1,2,3,4 type) each group of diseases belongs to:*
A. Allergic rhinitis, allergic conjunctivitis, atopic bronchial asthma, anaphylactic shock, allergic urticaria and Quincke's edema.- Type 1

B. Serum sickness, SLE, rheumatoid arthritis, Arthus reaction, bronchopulmonary aspergillosis, urticaria and Quincke's edema.Type 3
C. Contact dermatitis, drug allergy, thyroiditis, brucellosis, toxoplasmosis, candidiasis, tuberculosis.4 type

4. *List the types of allergens: pollen, household, epidermal, food, medicinal, insect, fungal, professional.*

Head of the department, dms Bestaev D.V.

STANDARDS OF SITUATIONAL TASKS
Federal State Budgetary Educational Institution
of Higher Education "North-Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3
Faculty Medical **Course 3**
Discipline Clinical immunology, partially implemented in English

Situational task № 1

Patient O., 21 years old, went to the doctor on May 22, 2003 with complaints of: lacrimation, redness of the eyes, runny nose, copious discharge from the nose of a mucus-like nature, an increase in body temperature to 37.6 degrees, fatigue, irritability, insomnia. It is known from the anamnesis: every year, in the last 3 years, the above complaints appear in the spring. He was treated independently – naphthyzine, suprastin, albucide with relative effect. I did not apply to specialists. Drug intolerance is not noted. From blood relatives - a native aunt (on the maternal side) has been ill with exogenous bronchial asthma since childhood (triggers are birch, poplar).
Questions:
1. Diagnosis and its justification.
2. What studies will help you confirm the diagnosis.
3. During the period of exacerbation, what medications will you recommend to the patient.
4. Which therapy is preferable in severe cases with this nosology.
5. What is the prognosis of this disease.

Head of the department, dms Bestaev D.V.

Federal State Budgetary Educational Institution
of Higher Education "North-Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3
Faculty Medical **Course 3**
Discipline Clinical immunology, partially implemented in English

Situational task № 2

A man, 28 years old, after an injection of penicillin in 2 minutes lost consciousness. On examination, the skin is clean, there is vesicular breathing in the lungs, there is no wheezing, the heart rhythm is correct, blood pressure +50/20 mmHg. When analyzing the outpatient chart, there is a history of allergy to insect bites, there is no drug allergy, heredity is not burdened.

Tasks for the task:

1)Establish a preliminary diagnosis
2) What questions to use in the collection of anamnesis
3) In what position should the patient be placed to provide assistance
4) The algorithm of first aid.

Head of the department, dms **Bestaev D.V.**

Federal State Budgetary Educational Institution
of Higher Education "North-Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3
Faculty Medical **Course 3**
Discipline Clinical immunology, partially implemented in English

Situational task № 3

A 28-year-old woman, after using hair dye after 30 minutes, there was heaviness of breathing, swelling of the lips, impaired patency from the larynx. The condition is moderate, the work of the respiratory and cardiovascular systems is not disturbed. The patient has a history of pollinosis for 5 years. Heredity is not burdened.

Tasks for the task:
1)Establish a preliminary diagnosis
2)What questions to use in the collection of anamnesis.
3) Urgent measures.
4) Determine further treatment tactics.

Head of the department, dms **Bestaev D.V.**

Federal State Budgetary Educational Institution
of Higher Education "North-Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3
Faculty Medical **Course 3**
Discipline Clinical immunology, partially implemented in English

Situational task № 4

A man, 44 years old, 15 minutes after taking a mixture of herbs from a cough, there was a sharp weakness, tinnitus, pouring sweat. The condition is severe, conscious. There is an increasing pallor of the skin, acrocyanosis, a progressive drop in blood pressure, a threadlike pulse, heart tones are sharply weakened, increasing difficulty breathing and swallowing. hell 50/30 mmHg From the anamnesis: The patient had no allergy in the anamnesis, heredity is not burdened.

The most likely diagnosis?
And Quincke's Edema
B) Acute urticaria
C) Anaphylactic shock

Head of the department, dms **Bestaev D.V.**

Federal State Budgetary Educational Institution
of Higher Education "North-Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3
Faculty Medical **Course 3**
Discipline Clinical immunology, partially implemented in English

Situational task № 5

During intravenous infusion of trental, the patient suddenly felt a sharp weakness, dizziness. When examined on the skin of the neck and chest - rashes by the type of urticaria. Shallow breathing, frequent, blood pressure - 60/20 mmHg, heart rate -128 in 1 minute.

Question 1: What condition can be assumed in the patient?
Question 2. What should be the tactics of treatment of this patient? Which drug should be used in this case first of all

Head of the department, dms **Bestaev D.V.**

№ЛД-21ИН

Federal State Budgetary Educational Institution of Higher Education "North- Ossetia State Medical Academy" of the Ministry of Healthcare of the Russian Federation

Department of Internal Diseases № 3

Benchmarks of test tasks
on the discipline of Clinical immunology
the main professional educational program of higher education is the specialty program in the specialty 31.05.01 General Medicine, partially implemented in English, approved on 24.05.2023

for students of the Faculty of Medicine 3th year

by specialty 31.05.01 General Medicine

Reviewed and approved at the meeting of the Department
dated February 03, 2021. (Protocol № 3)

Head of the Department, MD. _____ Bestaev D. V.

Vladikavkaz 2023

Table of contents

*The name of the supervised section (topic) or topics (sections) of the discipline/ module is taken from the work program.

1. Phagocytic cells include:

A) macrophages

B) neutrophils

C) Th-lymphocytes

D) NK cells

E) B-lymphocytes.

2. Name the cells that are formed in the bone marrow:

A) lymphocytes

B) red blood cells

C) dendritic cells

D) basophils

E) all of the above is true.

2. The main functions of the macrophage:

A) synthesis of immunoglobulins

B) presentation of the antigen to T-helpers

C) synthesis of perforins

D) participation in allergic reactions of the immediate type

E) all of the above is true.

4. Name the peripheral organs of the immune system:

A) bone marrow

B) liver

C) thymus

D) spleen

E) the pancreas.

5. Immunocompetent cells are:

A) dendritic cells

B) eosinophils

C) B-lymphocytes

D) Kupfer cells

E) mast cells.

6. The natural immunity of newborns is formed as a result of:

A) vaccinations

B) administration of immune serums

C) transfer of antibodies from mother to fetus

D) antibiotic therapy

E) all of the above is true.

7. Reactions of cellular immunity are carried out:

A) neutrophils

B) eosinophils

C) plasma cells

D) T-lymphocytes

E) mast cells.

8. The central organs of the immune system are:

A) bone marrow

B) Peyer's intestinal plaques

C) the spleen

D) thymus

E) blood.

9. After the introduction of the vaccine, immunity is formed:

A) artificial passive

B) artificial active

C) natural passive

D) natural active

E) local.

10. Immunoglobulins include:

A) to lipopolysaccharides

B) to alpha globulins

C) to albumins

D) to gamma globulins

E) to nucleotides.

MODULAR CONTROL № 1

1. There are the following variants of pathological processes involving immune reactions:

a)primary immunodeficiency

b)secondary immunodeficiency

c)autoimmune diseases

d)allergicdiseases

2. Secondary immunodeficiencies are:

a) hereditary diseases caused by the presence of defective genes

b)violation of the immune status as a result of somatic and other diseases and under the influence of environmental factors

c) realization of the state of sensitization in the clinical form of an allergic disease

3. For secondary immunodeficiency, the following provisions are valid:

a) they develop against the background of a previously normally functioning immune system

b) they are a risk zone for the development ofchronic infectious diseases

c) they are characterized by a steady decrease in resistance indicators

4. The features of secondary immunodeficiency are the following disorders:

a)disorders in the immune system are persistent

b)disorders in the immune system are both quantitative and qualitative in nature

c) disorders in the immune system are only qualitative in nature

5. The modern classification of secondary immunodeficiency is based on the following signs:

a)the predominant defeat of a particular link of immunity.

b) primary damage to a particular organ system

c) primary damage to a particular functional system of the body

6. According to WHO experts, the causes of secondary immunodeficiency are the following:

a)bacterial infections

b)viral infections

c)nutritional disorders

d)stress effects

7. Secondary immunodeficiencies include the following:

a)insufficiency of humoral immunity

b)insufficiency of cellular immunity

c) combined insufficiency of humoral and cellular immunity

d)phagocyte insufficiency

e)complement insufficiency

8. The causes of secondary immunodeficiency include:

a)radiation

b) chemotherapy

c) genetic mutations

9. For laboratory testing for the presence of secondary immunodeficiency, the following tests are used:

a)the number of B-lymphocytes

b) the activity of phagocytosis

c) determination of the amount of C3

10. Immunosuppressive viruses include:

a)herpes virus

b)cytomegalovirus

c) herpes virus