

Test questions from the course "Oncoimmunology"

1. A tumor (neoplasia, neoplasm) is:
A) a type of abnormal and excessive tissue growth
B) consists of cells whose growth is not consistent with the growth of normal, surrounding tissues
C) all answers are correct
2. Direct carcinogenic factors that lead to cancer include those that:
A) directly change DNA
B) require metabolic transformation
C) all answers are correct
3. Pro-carcinogens include:
A) carcinogenic factors that require metabolic transformation
B) carcinogenic factors that directly change DNA
C) all answers are correct
4. Benign tumors are characterized by the following features:
A) local invasion
B) metastasize
C) rapid infiltrative growth
5. Cancer or carcinoma is:
A) malignant epithelial tumor
B) benign tumor
C) malignant mesenchymal tumor nature
6. Sarcoma is:
A) a malignant tumor of mesenchymal nature
B) a malignant tumor of connective tissue
C) all answers are correct
7. Signs of anaplasia - cellular atypism are:
A) hyperchromatism and gigantism of cells, pathological mitoses and chromosome abnormalities
B) pronounced nucleoli, high nuclear-cytoplasmic ratio, variable morphology of the nucleus.
C) all answers are correct
- 8) Tumor-specific antigens:
A) are found only in cancer cells
B) are produced by cancer cells and are capable of inducing an immune response
C) all answers are correct
- 9) Tumor-associated antigens are those that:
A) are expressed at elevated levels in tumor cells
B) may be expressed at lower levels in healthy cells
C) all answers are correct
- 10) The main cells responsible for the direct recognition and destruction of tumor cells are:
A) T-lymphocytes -killers
B) T-lymphocytes -helpers
C) B-lymphocytes

11. Tumor cancer cells differ from healthy normal cells by the presence of:
- A) class 1 histocompatibility antigens
 - B) class 2 histocompatibility antigens
 - C) specific tumor antigens
12. Nobel Prize in Medicine in 2018 was awarded to James Allison and Tasuku Honjo for their research on protein markers of T lymphocytes:
- A) CTLA-4 and PD-1
 - B) alpha and beta chains of class 2 histocompatibility antigens
 - C) alpha chain and $\beta 2$ microglobulin of class 1 histocompatibility antigens
13. J. Allison discovered that the CTLA-4 protein, which is found on the surface of T cells:
- A) is an immunostimulator that activates T lymphocytes for killer activity
 - B) acts as a brake - a type of checkpoint of the immune system that the body uses to avoid a dangerous overreactive immune response
 - C) does not participate in the immune response
14. Nobel laureates James Allison and Tasuku Honjo independently developed immunobiological drugs for the treatment of cancer patients containing, which block the functions of the CTLA-4 and PD-1 proteins
- A) antibodies
 - B) antigens
 - C) all answers are correct
15. To create a vector anti-cancer vaccine, the following are used:
- A) influenza virus
 - B) herpes virus
 - C) adenovirus
16. The anti-cancer vaccine contains
- A) killed bacteria
 - B) toxoid
 - C) proteins produced by tumor cells
17. To nonspecific cellular factors of antitumor immunity include:
- A) macrophages
 - B) normal killer cells NK
 - C) all answers are correct
18. Immunogenic tumor antigens are characterized by the following features:
- A) high molecular weight
 - B) have a complex molecular structure
 - C) all answers are correct
19. Nonspecific humoral factors of antitumor immunity include:
- A) interleukin 2
 - B) tumor necrosis factor
 - C) all answers are correct
20. Tumor markers include:
- A) Class I histocompatibility antigens
 - B) Tumor antigens

C) Class II histocompatibility antigens