

Lecture3: Cells and tissue of the immune system. Part 2

Lecture4: Cells and tissue of the immune system. Part 3



1. A cell expressing CD3pos, CD25 pos, is a:

- (A) ($\gamma\delta$) T cell
- (B) Helper T cell
- (C) Cytotoxic T cell
- (D) Regulatory T cell
- (E) Natural killer cell

ANSWER: D

2.A CD3pos cell that secretes

perforin and granzyme is a:

- (A) ($\gamma\delta$) T cell
- (B) Helper T cell
- (C) Cytotoxic T cell
- (D) Regulatory T cell
- (E) Natural killer cell

ANSWER: C

3. Antibodies in our body are produced by:

- (A) B-lymphocytes
- (B) T-lymphocytes
- (C) Monocytes
- (D) RBC's

ANSWER: A

4. Plasma cells are the end cells of

- (E) T-cells
- (F) β -cells
- (G) Killer cells
- (H) NL-cells

ANSWER: B

5. Dendritic cells, macrophages, and what other cell types are considered “professional antigen presenting cells,” capable of antigen presentation to T helper cells?

- (A) B cells
- (B) Basophils
- (C) Eosinophils
- (D) Mast cells
- (E) Neutrophils

ANSWER: A

6. If a person had a genetic defect affecting perforin production, which cells and immune function would be affected?

- (A) Cytotoxic T cells and natural killer cells/cell killing
- (B) Dendritic cells/antigen presentation
- (C) Eosinophils and basophils/granule production
- (D) Macrophages and neutrophils/phagocytosis
- (E) Mast cells/fusion of granules to cell membrane

ANSWER: A

7. Antigen receptors on T and B cells share

which similar feature?

- (A) Affinity maturation occurs following antigen recognition for both receptor types
- (B) Interaction with MHC molecules is required for antigen recognition by both receptor types
- (C) The constant regions of both receptor types are identical
- (D) The specific city of both receptor types is determined following exposure of mature cells to antigen
- (E) The variable portions of both receptor types are generated by random recombination of genes

ANSWER: E

8. Which immune system cells recognize body cells with reduced expression of MHC class I molecules?

- (A) Cytotoxic T cells
- (B) Dendritic cells
- (C) Macrophages
- (D) Natural killer cells
- (E) Neutrophils

ANSWER: D

9. Antigen presenting cells (APCs) are required for T-cell recognition of specific antigen and activation. APCs accomplish this task by presenting antigen in the context of which of the following molecules?

- (A) T-cell receptor (TCR)
- (B) Toll-like receptor (TLR)
- (C) Major histocompatibility complex (MHC)
- (D) Killer inhibitory receptor (KIR)
- (E) FCR

ANSWER: C

10. The difference between tolerance and immunity depends upon the maturation status of the antigen presenting dendritic cells.

What is the T-cell outcome of an antigen presentation event by a mature dendritic cell?

- (A) Anergy
- (B) Apoptosis
- (C) Activation
- (D) Ignorance
- (E) Suppression

ANSWER: C

11. DiGeorge syndrome is known to increase likelihood of infection of some microbes, why is that? (Mentioned in meeting)

- A) due to a mutation in one of the proteasome genes
- B) due to the underdeveloped pharyngeal pouches that make up the thymus
- C) due to a absent MHC receptor in certain cells
- D) more than one of the above is correct

ANSWER: B

12.If a virus snuck into the body , which of the following would you expect to be the last killer?

- A) the humoral response initiated by FDC
- B) cytotoxic T cells through caspase cascade apoptosis
- C) helper T cells through cytokines that help the macrophages fight it
- D) through the many epithelial barriers throughout the body

ANSWER: C

13.Which of the following describes the hematopoietic centers in Gestation?

- A) blood island => liver => bone marrow
- B) bone marrow => blood islands => liver => bone marrow
- C) liver => blood islands => bone marrow
- D) they never change from bone marrow

ANSWER: A

14.Which of the following peripheral immune tissues is likely to be different from teen through life to old age?

- A) spleen
- B) MALTs
- C) thymus
- D) lymph nodes

ANSWER: C

15. which of the following is needed to ensure a healthy T cell army that doesn't attack our own cells?

- A) MALTs
- B) TMECs
- C) APCs
- D) all the above are needed

ANSWER: B

16. Which of the following molecules triggers the caspase cascade And through which cells

- A) perforins/granzymes through CD8 cells
- B) isozymes through CD4 cells
- C) isozymes through CD8 cells
- D) perforins/granzymes through CD4 cells

ANSWER: A

