

Immunology Questions

1. Which of the following factors would least prompt you to advise anti-bee venom immunoglobulin?

- A. Local urticaria
- B. Generalized urticaria
- C. Anaphylaxis
- D. Large local reaction
- E. Distant angioedema

2. A mutation in which surface molecule is protective against HIV infection in Caucasians?

- A. CD4
- B. CXCR4
- C. MHC class I
- D. MHC class II
- E. CCR5

3. Where are cells expressing both CD4 and CD8 found?

T lymphocytes

- A. Spleen
- B. Thymus
- C. Bone Marrow
- D. Placenta
- E. Lymph nodes

4. A 60 year old woman present with angioedema. She has never had any previous episodes. She has been treated with perindopril 4mg for hypertension for the last 18 months. She has recently had a lower respiratory tract infection and has been treated with penicillin over the last 7 days. What is the most likely cause of her angioedema?

- A. Food allergy
- B. ACE inhibitor therapy
- C. C1q esterase deficiency
- D. Hereditary angioedema
- E. Penicillin

5. Which of the following immunosuppressive drugs least interferes with the secretion of IL-2?

- A. Prednisolone
- B. Mycophenolate mofetil
- C. Rapamycin
- D. Cyclosporine

E. Tacrolimus

6. Which of the following components of the complement cascade is responsible for the formation of the transmembrane channel through bacterial cell walls, which leads to cell lysis?

- A. C3a
- B. C3b
- C. C4a
- D. C5a
- * E. C5-9

7. Which of the following is the worst prognostic factor in an episode of acute rejection post renal transplantation?

- A. Tubular infiltration of CD8+ cells
- * B. Acute vascular rejection
- C. HLA-DR expression on the graft
- D. Diffuse interstitial infiltrate of mononuclear cells
- E. Glomerular T-cell infiltrate

8. The major function of dendritic cells is:

- A. Immunoglobulin secretion
- B. Phagocytosis
- C. Chemokine secretion
- * D. Antigen presentation
- E. Cytokine secretion

9. Which of the following acute phase reactants increases the most and the fastest?

- A. Fibrinogen
- B. C3
- C. Transferrin
- * D. CRP
- E. Haptoglobin

10. What is the mechanism of superantigen action?

- * A. Formation of cross links between MHC II and T cell receptor but not at the usual site
- B. Direct binding to the B chain of the T cell receptor
- C. Direct binding to MHC II
- D. Antigen presentation in the groove of MHC II
- E. Direct binding of antigen to MHC II