

1. Pathogen-associated molecular patterns (PAMPs) binding to endocytic pattern recognition receptors (PRRs) is the mechanism behind:

- A. Activation of phagocytes.
- B. Chemotaxis of phagocytes.
- C. Unenhanced attachment of phagocytes.
- D. Enhanced attachment of phagocytes.
- E. Ingestion of microbes by phagocytes.
- F. Destruction of microbes by phagocytes.

2. Lysosomes fusing with phagosomes is the mechanism behind:

- A. Activation of phagocytes.
- B. Chemotaxis of phagocytes.
- C. Unenhanced attachment of phagocytes.
- D. Enhanced attachment of phagocytes.
- E. Ingestion of microbes by phagocytes.
- F. Destruction of microbes by phagocytes.

3. Circulating phagocytes produce surface receptors that enabling them to squeeze out of the capillary and be attracted to the site of infection, produce PRRs, and increase metabolic and microbicidal activity. This best describes:

- A. Activation of phagocytes.
- B. Chemotaxis of phagocytes.
- C. Unenhanced attachment of phagocytes.
- D. Enhanced attachment of phagocytes.
- E. Ingestion of microbes by phagocytes.
- F. Destruction of microbes by phagocytes.

4. Defense molecules such as IgG, C3b, C4b, CRP, and MBL are involved in:

- A. Activation of phagocytes.
- B. Chemotaxis of phagocytes.
- C. Unenhanced attachment of phagocytes.
- D. Enhanced attachment of phagocytes.
- E. Ingestion of microbes by phagocytes.
- F. Destruction of microbes by phagocytes.

5. Movement of phagocytes toward an increasing concentration of some attractant such as PAMPs, C5a, chemokines, fibrin split products, kinins, and DAMPs best describes:

- A. Activation of phagocytes.
- B. Chemotaxis of phagocytes.
- C. Unenhanced attachment of phagocytes.
- D. Enhanced attachment of phagocytes.
- E. Ingestion of microbes by phagocytes.
- F. Destruction of microbes by phagocytes.

6. Polymerization and then depolymerization of actin filaments send pseudopods out to engulf microbes and place them in phagosomes best describes:

- A. Activation of phagocytes.
- B. Chemotaxis of phagocytes.
- C. Unenhanced attachment of phagocytes.
- D. Enhanced attachment of phagocytes.
- E. Ingestion of microbes by phagocytes.
- F. Destruction of microbes by phagocytes.

7. Bacterial capsules best help bacteria block:

- A. Enhanced attachment.
- B. Unenhanced attachment.
- C. Destruction by lysosomes.
- D. Chemotaxis of phagocytes.
- E. Activation of phagocytes.

8. By blocking the acidification of the phagosome, some bacteria are better able to resist:

- A. Enhanced attachment.
- B. Unenhanced attachment.
- C. Destruction by lysosomes.
- D. Chemotaxis of phagocytes.
- E. Activation of phagocytes.



9. Most tissue destruction associated with bacterial infections is a result of:

- A. Bacterial toxins.
- B. Extracellular killing by phagocytes.
- C. Immunodeficiency.
- D. Cytotoxic T-lymphocytes.

10. People that lack the enzyme oxidase in the cytoplasmic membrane of their phagocytes due to a genetic disorder are more susceptible to infection because:

- A. Their phagocytes cannot migrate to the site of infection.
- B. Their phagocytes cannot produce reactive oxygen species (ROS) that kill microbes.
- C. Their phagocytes cannot produce defensins and acid hydrolases (proteases) that kill microbes.
- D. Their phagocytes cannot produce pseudopodia.