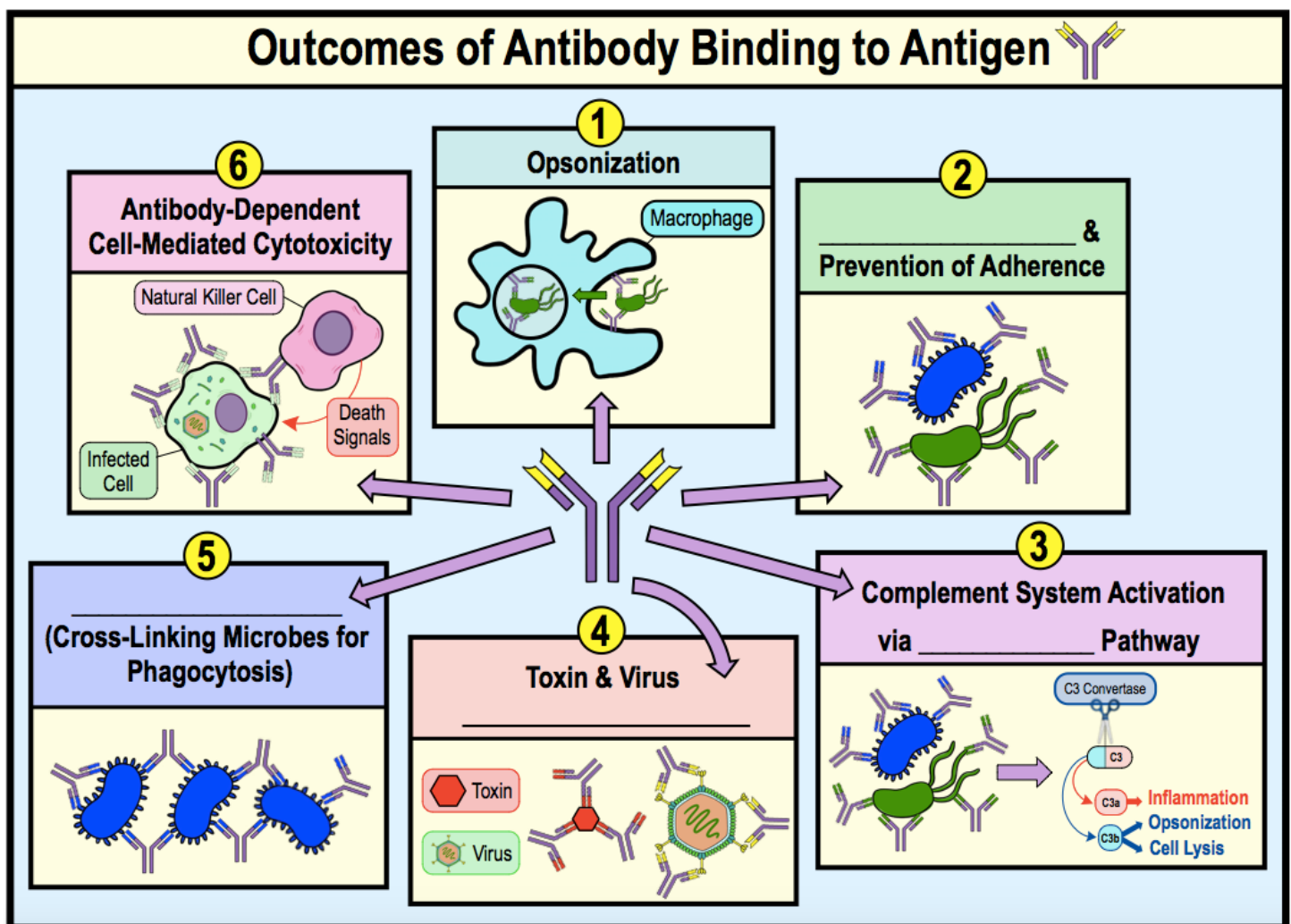


CONCEPT: OUTCOMES OF ANTIBODY BINDING TO ANTIGEN

● Once antibodies are secreted from plasma cells & bind their antigens, they can result in many possible outcomes:

□ **Serology:** the scientific study of blood serum, especially its antigen-_____ reactions.

- 1) **Recall: Opsonization:** process that makes microbes _____ to bind/engulf during *phagocytosis*.
- 2) **Prevent Adherence & Immobilize:** antibodies can block or immobilize microbes to prevent infecting host cells.
- 3) **Recall: Complement System Activation:** activation of _____ pathway via antibody binding.
- 4) **Toxin/Virus Neutralization:** Antibodies bind *toxins* & _____ to make them ineffective & harmless.
- 5) **Agglutination:** antibodies can bind to multiple antigens, _____-linking them for phagocytosis in *large groups*.
- 6) **Antibody-Dependent Cell-mediated Cytotoxicity** (_____): NK cells target/kill antibody-bound *infected cells*.



PRACTICE: Which term describes antibodies binding to a virus preventing it from attaching to host cells?

- a) Opsonization. b) Agglutination. c) Neutralization. d) Activation. e) Coagulation.

CONCEPT: OUTCOMES OF ANTIBODY BINDING TO ANTIGEN

PRACTICE: The study of antigen-antibody reactions is referred to as _____.

- a) Immunology.
- b) Toxicology.
- c) Pandemicity.
- d) Serology.
- e) Epidemiology.

PRACTICE: Which of the following is NOT a protective outcome of antibody-antigen binding?

- a) Antibody-antigen complex triggering the complement system when bound to an antigen.
- b) Antibodies cross-linking pathogens so that they can be easily phagocytosed by macrophages.
- c) Antibodies signaling to a cytotoxic T cell that a host cell is infected.
- d) Antibodies binding to bacteria and prevent the bacteria from moving throughout the body.
- e) Antibodies binding to blood vessel walls resulting in vasodilation.