

PART I: Provide a well-conceived, *one-page* overview of TRANSPLANTATION. (Remember: This effort is meant to be effective preparation for *you* for the final exam.)

TRANSPLANTATION IMMUNOLOGY

- I. Immunologic Basis of Graft Rejection
 - A. Specificity and memory of the Rejection Response
 - B. Role of Cell-Mediated Responses
 - C. Transplantation Antigens
 - D. Tissue Typing
 - E. Mechanisms Involved in Graft Rejection
 1. Sensitization Stage
 2. Effector stage
- II. Clinical Manifestations of Graft Rejection
 - A. Hyperacute Rejection
 - B. Acute Rejection
 - C. Chronic Rejection
- III. General Immunosuppressive Therapy
 - A. Mitotic Inhibitors
 - B. Corticosteroids
 - C. Cyclosporin A, FK506, and Rapamycin
 - D. Total Lymphoid Irradiation
- IV. Specific Immunosuppressive Therapy
 - A. Antibodies to T-Cell Components or Cytokines
 - B. Agents that Block the Co-Stimulatory Signal
- V. Clinical Transplantation
 - A. Kidney Transplantation
 - B. Bone-Marrow Transplants
 - C. Heart Transplantation
 - D. Lung Transplantation
 - E. Liver Transplantation
 - F. Pancreas Transplantation
 - G. Skin Grafting
 - H. Xenotransplantation
 - I. Transplants to Immunologically Privileged Sites

PART II: Provide a well-conceived, *one-page* overview of VACCINES.

VACCINES

- III. Active and Passive Immunization
 - A. Passive Immunization
 - B. Active Immunization
- II. Designing Vaccines for Active Immunization
- III. Whole-Organism Vaccines
 - A. Attenuated Viral or Bacterial Vaccines
 - B. Inactivated Viral or Bacterial Vaccines
- IV. Purified Macromolecules as Vaccines
 - A. Polysaccharide vaccines
 - B. Toxoid Vaccines
 - C. Recombinant Antigen Vaccines
- V. Recombinant-Vector Vaccines
- VI. DNA Vaccines
- VII. Synthetic Peptide Vaccines
- VIII. Multivalent Subunit Vaccines