ASCP BOARD OF CERTIFICATION

VALID ONLY FOR QIA TESTING DATES UP TO AND INCLUDING AUGUST 31, 2025

QUALIFICATION IN APHERESIS (QIA)

EXAMINATION TOPIC OUTLINE

The Qualification in Apheresis (QIA) examination questions encompass different topics or content areas within Apheresis: Basic Science, Clinical Applications, Donor/Patient Care, Instrumentation, Operational Considerations, and Standards, Guidelines, and Regulations. Each of these content areas comprises a specific percentage of the overall 50-question qualification examination.

Exam questions may be both theoretical and/or procedural. Theoretical questions measure skills necessary to apply knowledge. Procedural questions measure skills necessary to perform apheresis techniques and follow quality assurance protocols. Additionally, regulatory questions are based on U.S. sources (e.g., AABB, FDA, CLIA, etc.). The content areas and percentages are described in detail below.

I. Basic Science (10 – 15%)

- A. Hematology/Coagulation
- B. Immunohematology/Genetics
  1. Blood component therapy
  2. HLA
  3. ABO
- C. Immunology
  1. Antibodies
  2. Immune complexes
- D. Laboratory Testing

II. Clinical Applications (15 – 25%)

- A. Donor Apheresis
  1. Platelets
  2. Red blood cells
  3. Plasma
  4. White blood cells (e.g., granulocytes)
- B. Therapeutic Apheresis
  1. Plasma exchange
  2. Red cell exchange
  3. Cellular depletions
  4. Selective adsorption/filtration procedures
- C. Cellular Therapy
  1. Hematopoietic progenitor cells (HPCs)
  2. Extracorporeal photopheresis (ECP)
  3. Mononuclear cell collections (e.g., lymphocytes, monocytes)
- D. Diseases Treated with Apheresis

III. Donor/Patient Care (30 – 40%)

- A. Assessment/Monitoring
- B. Replacement Fluids
- C. Anticoagulation
- D. Medications (e.g., calcium, antihistamine) and Drug Interactions
- E. Venous Access
- F. Fluid Balance
- G. Age-Related Considerations
- H. Adverse Reactions

IV. Instrumentation (5 – 10%)

- A. Theories and Techniques of Separation
  1. Centrifugation (e.g., intermittent and continuous flow)
  2. Membrane
  3. Columns
- B. General Principles of Automated Instruments*
  1. Anticoagulation of extracorporeal circuit
  2. Extracorporeal blood volume
  3. Efficiencies of separation and/or collection
  4. Clinical applications (see II.A. – D.)

*The majority of instrument questions will address general processes and procedures applicable to most instruments (e.g., alarm codes for specific instruments will NOT be tested). The troubleshooting questions will address day-to-day problems encountered on any instrument; they will not be instrument specific.

V. Operational Considerations (10 – 20%)

- A. Quality Assurance (e.g., cGMP, cGTP, validation)
- B. Quality Control
  1. Product yield
  2. Instrument efficiencies
- C. Equipment Maintenance
- D. Safety (e.g., OSHA, CDC)
- E. Infection Control

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VI. Standards, Guidelines, and Regulations (ASFA, AABB, CAP, FDA, FACT, HIPAA, TJC, etc.) (10 – 15%)

A. Informed Consent
B. Confidentiality
C. Donor Selection
D. Facility Licensure and Accreditation
E. Training and Competency

Examples provided (as indicated by e.g.) are not limited to those listed.

All Board of Certification examinations use conventional and SI units for results and reference ranges.

END OF TOPIC OUTLINE