

# **Qualification in Apheresis - QIA**

**Examination Topic Outline** 

# **Examination Format**

The American Society for Clinical Pathology Board of Certification (ASCP BOC) QIA qualification examination is composed of 50 questions given in a 90-minute time frame. All examination questions are multiple-choice with one best answer. More information is available on the ASCP BOC website.

The examination 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.

## **Examination Content Areas**

The examination questions encompass the following content areas within apheresis. Each of these content areas comprises a specific percentage of the overall 50-question examination.

Content Area	Examination Percentage
Basic Science	10 - 15%
Clinical Applications	15 - 25%
Donor/Patient Care	30 - 40%
Operational Considerations	15 - 25%
Standards, Guidelines, and Regulations	10 - 15%

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- Regulatory questions on the examination are based on U.S. sources (e.g., AABB, FDA, CLIA, etc.).
- The examples provided in this topic outline (as indicated by e.g.,) are not limited to those listed.
- The laboratory results and reference ranges on the examination will be provided in both conventional and SI units.

### I. Basic Science

### 10 - 15% of total examination

- 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% of total examination

- 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 blood cell exchange
  - 3. Cellular reductions
  - 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



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### **III. Donor/Patient Care**

### 30 - 40% of total examination

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

# **IV.** Operational Considerations

#### 15 - 25% of total examination

- Quality Assurance (e.g., cGMP, cGTP, validation)
- **B.** Quality Control
  - 1. Product yield
  - 2. Instrument efficiencies
- C. Instrumentation (Note: Instrumentation questions will address general processes and procedures applicable to most instruments.)
  - Theories and techniques of separation (e.g., centrifugation [intermittent and continuous flow])
  - General principles of automated instruments
- D. Equipment Maintenance
- E. Safety (e.g., OSHA, CDC)
- F. Infection Control

# V. Standards, Guidelines, and Regulations (ASFA, AABB, CAP, FDA, FACT-JACIE, HIPAA, etc.)

# 10 - 15% of total examination

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

## **END OF TOPIC OUTLINE**