



**American  
Red Cross**

## **Biomedical Products and Services**



The American Red Cross is proud to offer an extensive suite of products and services, enhanced by our clinical experience and educational programs, to support your hospital's routine and complex patient needs.

Our vast network of laboratories and collection, manufacturing and distribution sites work in sync to deliver valued service to our hospital partners.

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### **BLOOD PRODUCTS FOR TRANSFUSION**

#### **Red Blood Cells (Leukoreduced)**

- Antigen negative
- CMV negative
- Irradiated
- Frozen and Deglycerolized
- Washed
- Reconstituted
- Pediatric:
  - » AS-1 and AS-3
  - » 5-day fresh
  - » Hgb S Negative
  - » 4 or 6 attached empty bags, not pre-aliquoted

#### **Low Titer Group O Whole Blood (LTOWB)**

- Cold stored, leukoreduced, platelet-sparing, low titer (1:200)

#### **Platelets (Apheresis platelet, leukoreduced, platelet additive solution (PAS))**

- Pathogen Reduced
- Pathogen Reduced Cold Stored
- Large Volume Delayed Sampling (LVDS-36 hour)
  - » LVDS irradiated
- Crossmatch compatible
- HLA Matched or HLA Selected
- HPA-1a Negative
  - Other HPA-negative units may be available upon request
- Low-Yield
- IgA Deficient

#### **Plasma**

- Frozen
  - » Apheresis derived (PF24RT24)
  - » Whole blood derived (PF24)
  - » Cryoprecipitate reduced
  - » IgA deficient
- Liquid
- Pediatric (FFP)
  - » Divided set of three

#### **Cryoprecipitated AHF**

- 5-Unit, ABO identical pools
- Single unit
- Pathogen Reduced Fibrinogen Complex (IFC15)



## LABORATORY SERVICES

### Immunohematology Reference Services

- Patient testing including red blood cell antibody identification, autoantibody evaluations, ABO discrepancy investigations, antigen typing
- Transfusion reaction investigations

### Specialized Tests

- Monocyte Monolayer Assay (MMA)
- DAT-negative hemolytic anemia investigation
- Drug-induced antibodies
- Donath-Landsteiner test
- Cold agglutinin screen and thermal amplitude test
- Sensitive IgA/Anti-IgA
- Hemoglobin F by flow cytometry to detect fetomaternal hemorrhage

### Histocompatibility Services

- Platelet transfusion support for refractory patients
- Related and unrelated donor Hematopoietic Cell Transplant (HCT) support
- HLA antibody screen and Single Antigen Bead (SAB) specificity identification (Class I and/or Class II)
- HLA-A/B/C/DR/DQ/DP low resolution typing by SSO or SSP
- HLA-A/B/C/DR/DQ/DP high resolution typing by NGS or SBT
- T and B cell flow crossmatch
- Chimerism study or engraftment monitoring with or without lineage specific subsets (T, B, NK, myeloid, and CD34 stem cell)
- KIR genotyping
- CCR5Δ32 variant detection by sequencing
- Molecular presumptive ABO typing
- HLA disease association/drug sensitivity
- Clinical trials and research testing
- Relationship testing

### Molecular Blood Group and Platelet Genotyping Services

- Human Erythrocyte Antigen (HEA) panel genotyping to predict 35 antigens including common red cell antigens and various high-prevalence antigens

- Identification of D variants including weak, partial and Del for determination of risk of allo-immunization and candidacy for Rh immune globulin
- Identification of C, c, E, e variants including V, VS, hr<sup>B</sup> and hr<sup>S</sup> status
- Identification of variant and null antigens in FY, KEL, JK, LU [including In(Lu)], MNS, YT, KN, XK (McLeod)
- Prediction of *RHD* Zygosity
  - » Human platelet antigens (HPA-1, 2, 3, 4, 5, 6, 9, 15)
  - » ABO Genotyping, medium and high resolution

### Platelet Serology Services

#### Testing for Immune-Mediated Thrombocytopenias

- Platelet Transfusion Refractoriness (platelet antibody screen and identification of antibodies to HPA-1, HPA-2, HPA-3, HPA-4, HPA-5, GPIV, and HLA Class I)
- HPA-1a (PI<sub>A1</sub>) Serological Typing
- Immune Thrombocytopenia (ITP)
- Drug-Induced Immune Thrombocytopenia
- Platelet Crossmatching
- Post-Transfusion Purpura (PTP)

#### Fetal/Neonatal Alloimmune Thrombocytopenia (FNAIT)

- Comprehensive FNAIT Workup
- FNAIT Monitoring

### Neutrophil Services

- Neutrophil Antibody Identification: Granulocyte Agglutination Test (GAT) and Granulocyte Immunofluorescence Test (GIFT)
- Monoclonal Antibody Immobilization of Neutrophil Antigens (MAINA)
- Neutrophil crossmatch
- Human Neutrophil Antigen (HNA) genotyping
- HLA antibody screen and HLA antibody identification Class I and/or Class II
- Transfusion Related Acute Lung Injury (TRALI) Investigation (Donor and Recipient)
- Alloimmune Neonatal Neutropenia (ANN)
- Autoimmune Neutropenia (AIN)
- Drug-dependent neutrophil antibody screen investigation (Donor and Recipient)





## **CLINICAL APHERESIS SOLUTIONS**

### **Therapeutic Apheresis Services**

- Plasmapheresis (therapeutic plasma exchange, TPE)
- Erythrocytapheresis (automated RBC reduction)
- Red Blood Cell Exchange (RBC exchange)
- Leukocytapheresis (WBC reduction)
- Thrombocytapheresis (platelet reduction)
- Extracorporeal Photopheresis (ECP)
- Therapeutic phlebotomy (manual RBC reduction)

### **Stem Cell Collection and Processing**

- Collection services from autologous or allogeneic donors
- Processing, freezing and shipping of cryopreserved cells
- Short and long-term cryopreservation of cells with intact viability
- Support of routine clinical care and clinical trials

### **Perioperative Autologous Cell Salvage**

- Scheduled or emergency services

## **CELL AND GENE THERAPY SOLUTIONS**

- Leukopak (allogeneic)
- Autologous Mononuclear Cell Collection Services
- BioPharma Contract Manufacturing
- Buffy Coats

## **VALUE ADDED SERVICES**

- Consultative Services by Subject Matter Experts
- Access to the American Rare Donor Program
- SUCCESS® Hospital Education Program
- Connect Hospital Order Management Solution
- Guided Onboarding Program
- Tailored Hospital Business Reviews
- Comprehensive Hospital Partner Resource Guide

For information on all available products and services, visit [RedCrossBlood.org](https://www.RedCrossBlood.org).



### **Mission**

The American Red Cross prevents and alleviates human suffering in the face of emergencies by mobilizing the power of volunteers and the generosity of donors.