7.0 Components and Testing

Contact Information:

Testing and Labeling Department

Phone: (817) 412-5731

7.1 Components Provided

All components listed below are ordered through Carter BloodCare' s Reference & Transfusion Services department. Product descriptions are available in the Circular of Information.

- Whole blood
  - Low Titer Group O Rh Positive Whole blood
- Anticoagulants available for whole blood products
  - CPD
- Red blood cells, leukocyte reduced
  - All red blood cell products are leukocyte reduced.
- Anticoagulants available for red blood cell products
  - CPD
  - CPD, AS-1 additive
  - CP2D, AS-3 additive
  - ACD-A, AS-3 additive
- Leukocytes; neonatal buffy coats, prepared from whole blood
- Cryoprecipitate AHF
- Cryoprecipitate reduced plasma
- Fresh frozen plasma*
  - *Representations of acceptable plasma units are included in the back of this section.
- Liquid Plasma
- Platelets, apheresis, leukocyte reduced, bacterial monitoring – all apheresis platelets collected and processed by Carter BloodCare are leukocyte reduced.*
- Platelets, apheresis, leukocyte reduced, cold stored*
  - *Apheresis platelets received in double bags will have an attached instructional tag explaining the process to pool prior to transfusion. Example of the tag is included in the back of this section.
- Granulocytes, apheresis are ordered through Reference and Transfusion/Clinical Apheresis.

- Lymphocytes, apheresis are ordered through reference and Transfusion/Clinical Apheresis.

7.2 Component Manipulation Services

Manipulation services are ordered only in conjunction with Reference & Transfusion services. Please refer to the Crossmatch Procedures section of this manual for ordering details.

- Leukoreduction – for those products not already leukocyte reduced
- Product washing – red blood cells and apheresis platelets
- Product freezing – red blood cells (special circumstances apply)
- Red blood cells thawing/deglycerolization
- Irradiation - All products are irradiated to ensure compliance with AABB Standards.
- Pooling - cryoprecipitate AHF
- Thawing - fresh frozen plasma or cryoprecipitate AHF
- Red cell and plasma aliquots (pediatric satellite bags)
- Volume-depletion
- Sickle cell negative
- CMV sero-negative
- Any combination of the above services

7.3 Donor Unit Testing

Carter BloodCare ensures the following tests are performed on a sample from each donation. Products are not released until all required testing is complete and results on record. Unless otherwise indicated, Creative Testing Solutions (CTS) performs the following tests on the Carter BloodCare campus in Bedford, Texas. Supplemental or Confirmation testing, if applicable, is sent to Creative Testing Solutions in Tempe, Arizona.

7.3.1 Routine Testing

- Total Cholesterol
- ABO blood type
- Rh (D) blood type
- Indirect Antiglobulin Test (IAT)
- Antibody Identification-performed by Carter BloodCare
- Serological Test for Syphilis (STS)
- Hepatitis B Core Antibody (HBc)

- Hepatitis B Surface Antigen (HBsAg)
- Hepatitis C Antibody (HCV)
- HIV-1/2 Antibody (HIV-1/2)
- HTLV-I/II Antibody (HTLV-I/II)
- Anti-*T-Cruzi* (Chagas'), one time testing per donor
- Nucleic Acid Amplification Test (NAT) - for HIV, HCV, HBV, and WNV

7.3.2 Other Tests Performed as Indicated:

- Bacterial Detection Quality Control Testing for apheresis platelets is performed at Carter BloodCare.
    - Testing method utilized is BacT/Alert® and Verax Biomedical Platelet PGD® (as applicable).
- Cytomegalovirus (CMV)
- Sickle cell trait (Hemoglobin S) performed by Carter BloodCare.

7.4 Testing and Labeling

The Testing and Labeling department provides testing of some patient samples for hospitals and other facilities. Samples are routed through and results are provided by the Testing and Labeling department.

Available tests are listed in the Test Information Chart in this manual (see section 8.0). Tests implemented after the printing of this manual may not be listed. An example requisition form is located at the back of this section. For information on new or available tests, please call the Hospital Relations department.

Confirmatory testing is automatically performed on samples for "Processing Profiles" with positive or reactive infectious disease tests.

Samples for ABO/Rh, IAT, hemoglobin S or other immunohematology testing should be submitted to the Reference and Transfusion Services department. Please refer to the Crossmatch Procedures section of this manual for details.

7.5 Placing an Order

Please complete the Remote Testing Test Requisition form for each sample submitted. This four-part form must be filled out completely and legibly. The following information must be completed:

- Name or ID#: Patient name or other identification number.
- Hospital: The hospital or facility requesting the testing and to which test results should be returned. If the two are not the same, please note this on the requisition.
- Address: The address of the hospital or facility (for billing purposes).
- Phone #: The phone number of a contact person within the hospital or facility.
- Fax #: The fax number of the contact person within the hospital or facility where test results should be sent. If email results are acceptable, please note email address in lieu of fax #.
- Physician: The name of the requesting physician, if applicable.
- Date Drawn & Time Drawn: The date and the time the sample was drawn.
- DIN or Barcode: The approved barcode number assigned to the sample at your facility. If your facility does not utilize approved barcodes, one will be assigned to the sample upon receipt.
- Check the requested test(s) to be performed. If a requested test is not specifically listed on the requisition, please note the test on the requisition.
- If you have specific test reporting needs, please specify this on the requisition.

NOTE: Forms are available from the Testing and Labeling or Hospital Relations Departments.

7.6 Specimen Collection and Preparation

Proper specimen collection and preparation is essential in order for us to provide a timely, accurate test result. Please adhere closely to the sample collection requirements. If you have any questions, please contact the Testing and Labeling department.

- Samples must be collected in 6 mL plastic vacutainer tubes. Specific sample requirements for each test are listed in the Test Information chart.
- Label each sample tube and requisition form with an approved barcode if available at your facility. Place the barcode vertical against the tube stopper.
    - Do not put any other identification numbers or barcode labels on the tube.
- If a barcode is not available, label each sample tube with the following information as recorded on the requisition form.
    - Patient name or other identification number
    - Hospital
    - Collection date

- Please inspect the sample tube(s) to ensure:
  - No defacement, tearing or alteration of the label
  - No broken or cracked tube
  - No tape placed on the tube label or over the tube stopper
  - The tube stopper is intact
  - A minimum of 4 mls of whole blood is present in each tube

It is important to follow manufacturer instructions for sample collection. Please pay careful attention that an adequate volume of sample is collected and that anticoagulated samples are properly mixed and are not hemolyzed.

7.7 Unacceptable Specimens

Proper identification of samples is essential to providing accurate laboratory results for the correct patient. The Testing and Labeling department will not accept unlabeled specimens, even when accompanied by paperwork bearing the patient's name. Incomplete or inaccurately labeled specimens will be evaluated to determine whether acceptable identification can be made and a report issued. If a sample is rejected for this reason, you will be notified by phone.

Sample integrity is crucial to accurate test results. Samples cannot be compromised due to conditions during collection, storage or transportation. The most frequent causes of unacceptable samples are hemolysis, excessive lipemia, incorrect sample type, insufficient sample volume, sample age, abnormal serum-to-cell ratio, and multiple labels or patient identification numbers on tube. If a sample is unacceptable for testing, you will be notified by phone.

7.8 Specimen Shipping

7.8.1 Sample Shipping Requirements

Samples should be packaged in a leak-proof container. OSHA requires that all samples be marked as biohazards.

Samples should arrive in the Testing and Labeling department no later than 5:00 p.m. to ensure test results are received within the turn-around-times listed in this section.

NOTE: Samples sent on or before holidays may be delayed due to lab testing holiday schedules.

7.8.2 Sample Delivery

Deliver samples and the accompanying requisition to:

Testing and Labeling

Carter BloodCare

2205 Highway 121

Bedford, TX 76021

Samples may be delivered to Carter BloodCare by:

- Delivering the sample using your own courier or driver.
- Sending the sample with a Carter BloodCare in-house delivery person.
  - Is typically not allowed.

7.9 Test Turn-Around-Time (TAT)

Test turn-around-times listed in the Test Information Chart are estimates based on sample receipt by 5:00 p.m. Requests for results by a specific date and time will be addressed on an individual basis. STAT testing is not available.

7.10 Test Cancellation

Tests may be canceled without charge if the cancellation notification is received before the sample has been submitted to the testing facility.

7.11 Results and Reports

Test results are sent from the testing facility to Carter BloodCare via the computer system. Results are reconciled upon receipt to ensure the computer has correctly received and interpreted the test results. Following reconciliation, a final result report will be emailed if address provided or faxed to your institution. Sample identification on the final results report is by use of the approved barcode number (the patient's name is not on the final results report). A copy of the original requisition listing the approved barcode number will be emailed or faxed with the final result report to provide accurate sample identification. If you would like the final result report to be sent to another source, please indicate this on the requisition.

Test results without final interpretations are not available.

7.12 Forms:

- TLF200.00A, Remote Testing Requisition Form (4 part/carbonless)
- HSL200, Carter BloodCare Platelet Apheresis Tag

7.13 Acceptable Plasma Examples

- Acceptable Plasma Example (1)
- Acceptable Plasma Example (2)