Name of Policy: Requisition and Selection of Blood and THE UNIVERSITY OF TOLEDO
MEDICAL CENTER **Blood Components Policy Number:** 3364-108-302 **Department:** Pathology/Laboratory – Blood Bank Chief Operating Officer – UTMC **Approving Officer:** Director, Blood Transfusion Service **Responsible Agent:** Blood Transfusion Service Supervisor Administrative Director, Lab 03/20/2023 Scope: **Effective Date:** Pathology/Laboratory – Blood Bank Initial Effective Date: 10/1986 Minor/technical revision of existing policy New policy proposal Major revision of existing policy Reaffirmation of existing policy

## (A) Policy Statement

The Blood Transfusion Service has organized a system for the requisition and selection of blood and blood components.

### (B) Purpose of Policy

To provide safe and appropriate blood and blood components with a minimum turnaround time.

## (C) Procedure

#### **Section 1: Request for Blood Transfusion**

All orders for Crossmatch, Type&Screen or blood component transfusion must be written on a "Request for Blood Transfusion" form or entered into HIS/LIS. Orders for Blood Transfusion Service tests must be entered into the hospital computer system by clinical staff to ensure specimen collection. Patient first and last names and patient identification number must be included on the "Request for Blood Transfusion" or specimen collection list to ensure positive patient identification when the specimen is collected. The request must also state the type and amount of component needed, the date of request/ date of need, and identify the requesting physician. BTS staff may take telephoned or verbal orders and document the request including the patient ID, ordering physician, blood order, and person making the request on the Telephone Request Log in the Blood Bank and enter the orders into BBIS.

# Section 2: Turn-around-time

All STAT orders for blood products and testing should be completed within 40 minutes of specimen receipt. Routine orders for crossmatch should be completed within four hours. Notify the nursing unit when blood products requested STAT are available. Record the time and the person contacted in the LIS report. If there is an unusual delay in the availability of a blood product, notify the Blood Transfusion Service Medical Director and the nursing unit.

#### **Section 3: Use of Blood and Blood Components**

- Red Blood Cell Products AS-1 or AS-3 Red Blood Cells (Adenine-Saline added), Leukocyte-reduced (prestorage) or CPD Red Blood Cells are routinely used for all RBC orders. IBM washed RBC are available only by special order with advanced notice. Orders for washed cells must be verified and approved by the BTS Medical Director. Packed red blood cell recipients shall receive ABO group-compatible Red Blood Cells. Rh negative recipients should receive Rh negative Red Blood Cells unless inventory levels dictate the use of Rh positive Red Blood Cells for male recipients and women over child-bearing age (50). Rh positive recipients may receive Rh positive or Rh negative Red Blood Cells.
- *Plasma Products* includes Fresh Frozen Plasma, Plasma Frozen with 24 hours of collection, and Plasma Cryoprecipitate Reduced. Select ABO type-specific or ABO type-compatible plasma. See table below. A

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blood type (BLT) must be performed for administration of ABO type-specific plasma. If no specimen is available for a blood type, use type AB plasma. Use type AB plasma for patients less than six months old. Rh type need not be considered when transfusing plasma. Thaw immediately prior to transfusion using an overwrap in a 30-37°C circulating water bath with frequent agitation. Use thawed plasma within five days. When plasma is thawed a new label is generated with an updated product code and expiration date.

- Cryoprecipitated AHF Thaw cryoprecipitate immediately prior to transfusion in a 30-37°C circulating water bath, using an overwrap. Unit may be selected without regard to ABO or Rh type. Cryoprecipitate must be used within six hours of thawing or within four hours if pooled in an open system. Cryoprecipitate pooled using a sterile connecting device prior to freezing must be used within six hours of thawing. When cryoprecipitate is thawed a new label is generated with an updated product code and expiration date.
- Single Donor Platelets Leuko-reduced Single-Donor Platelets by Pheresis are available through ARC. UTMC also has a standing order for five Pathogen Reduced Single-Donor Platelets per week. Consult the BTS Medical Director or O.D. when orders for platelets are received on patients that do not meet transfusion indication criteria. Donor plasma in platelets should be ABO-compatible with adult recipients whenever possible. See table below. Use only Rh negative platelets for Rh negative female recipients of child-bearing age or younger. Notify the BTS Medical Director if Rh positive platelets are given to an Rh negative female recipient of child-bearing age or younger, to ensure initiation of Rh Immune Globulin prophylaxis. Platelets, Pheresis are prepared by a method known to results in a component containing less than 2 mL RBC. When a product containing over 2 mL RBC is received, it should be rejected. If transfusion of the product is imperative, the unit must be crossmatched and compatible using cells from a donor sample. Patients refractory to platelet transfusion must have a ten minute to one-hour post-transfusion platelet count to assess the response to transfusion. HLA-matched products may be ordered if the patient meets indication criteria and has been HLA typed. When HLA-matched LRSDP are not available, a trial of crossmatched platelets may be indicated. Inform the BTS Medical Director when the initial request for HLA-matched SDP or crossmatched platelets is received.

### Section 4: Use of Non-type-specific Blood

Refer to table below. Type-specific donor units are preferred with the following exceptions:

- Emergency situations in which inventory levels of type-specific blood are depleted or immediately unavailable.
- Patients demonstrating incompatibility to type-specific blood following transfusion of non-type-specific blood (Type A patient transfused with several units type O blood and is now incompatible with type A units).
- Special Antigen typed units that are type-compatible but not type-specific.

## Section 5: Use of Rh positive Blood for Rh negative or Rh unknown patients

Rh positive blood may be used for Rh negative patients in the following situations. Notify the BTS Medical Director so that Rh Immune Globulin prophylaxis may be ordered at the request of the patients' attending physician:

- Male recipient with negative antibody screen; Rh negative blood in short supply
- Female patient over 50 years with negative antibody screen; Rh negative blood in short supply
- Male recipient of unknown blood type when type O Rh negative blood is in short supply
- Rh negative Massive Transfusion protocol patients (male or women over 50 years of age)

# DONOR-RECIPIENT COMPATIBILITY

ABO Type -(Recipient)	Type-compatible RBC ( Donor)	Type-compatible Plasma (Donor)
O	O	O,A,B,AB
A	A,O	A,AB
В	В,О	B,AB
AB	AB,A,B,O	AB
Unknown	O (Rh negative if available and appropriate)	AB

Approved by:		Review/Revision Date:
Lauren Stanoszek, M.D. Assistant Professor Director, Blood Transfusion Service	03/21/2023 Date	6/96 6/9/2008 1/98 3/22/2011 3/99 3/01/2013 8/00 3/2/2015 9/02 3/1/2017 1/05 3/1/2019 7/06 3/1/2021 1/2008 3/20/2023
/s/	03/21/2023	
Christine Stesney-Ridenour Chief Operating Officer - UTMC	Date	-
Review/Revision Completed By: Danielle Weilnau, MLS(ASCP) <sup>CM</sup>		Next Review Date: 3/1/2025
licies Superseded by This Policy:		•

Reference: AABB Standards for Blood Banks and Transfusion Services, current edition.