Specific Blood Bank – Transfusion Medicine Information

This guide provides information on blood components for transfusion and how to obtain them from the Kent Hospital Blood Bank Laboratory.

Place a Blood Product Order for each type of component ordered. In the event of a computer downtime, forms will be available in Patient-Care areas. A current Type and Screen (ABO/Rh and Antibody Screen) is required for all RBC transfusions. A current ABO/Rh is required for all plasma product transfusions. A confirmation ABO/Rh is required if RBCs are needed if a patient has no history.

Refer to the Kent Hospital Criteria for Blood Transfusion policy for indications. The **Circular of Information** (COI) For the Use of Human Blood and Blood Components can be consulted. This includes general information, indications for use, and side effects. COI copies are available from the AABB, New York Blood Center, and other relevant websites.

Special products can be obtained and components can be processed to accommodate special needs.

When blood products are needed, bring a copy of a signed "Informed consent for Blood Transfusion" Form and printed LIS order to the blood bank lab when ready to transfuse. The form must include 2 patient identifiers (name and Medical Record number and/or date of birth), the patient's location, and the specified component(s). Note: The patient's FIN is assigned for each visit and blood may be crossmatched on a FIN which is different when the patient is transfused. The FIN does not have to match.

Red Blood Cells

All allogeneic red cells dispensed are pre-storage leukoreduced. LRBCs may be ordered with additional special processing, as appropriate for specific patients. A current specimen is required for crossmatching.

Platelets

The Kent Hospital Blood Bank will obtain leukoreduced platelets based on each patient's ABO/Rh and component availability, when an order to transfuse is received and confirmed. All platelets are obtained from donors via apheresis and are the equivalent to 6 doses of single donor platelets. Platelets take approximately 1 hour to order, ship, receive from RIBC, and prepare for issue. Crossmatching is not needed unless it is a rare PLT condition.

Fresh Frozen Plasma (FFP), Thawed Plasma (TP) and Cryoprecipitate (Cryo)

FFP or Cryo takes approximately 20 minutes to thaw and prepare for issue. Once ordered for transfusion, FFP expires within 24 hours and is dispensed in single units. FFP is extended to Thawed Plasma and may be dispensed as for up to 4 additional days, depending on the reason for Transfusion. Cryo is dispensed as a pooled dose and expires within 4 -6 hours of thawing, depending on pool process. Cross matching is not needed, ABO group specific or compatible type is issued, Rh is not a consideration due to lack of red cells. In an emergency, when the patient's blood group is unknown, group AB will be issued, dependent on availability.

Rho (D) Immune Globulin (RhIG)

Given ante partum and post-partum to Rh Negative patients. At least one dose is clinically indicated after trauma, miscarriage, amniocentesis, and post-partum to patients who are Rho (D) negative and free of immune anti-D, based on current testing. For post-partum Rhogam, the infant must be Rh positive. If a baby's Rh is positive or cannot be determined, Rhogam should be given within 72 hours of delivery.

Transfusion Reactions

Transfusion Reactions may occur with any component and should be reported to a Blood Bank Lab Tech. Return the blood component container to the blood bank along with the appropriate paperwork and specimens and order a Transfusion Reaction Workup, Urinalysis, and Haptoglobin.

Emergency Release: The blood bank dispenses uncrossmatched or incompletely tested blood when units are not readily available for a critical need. The ordering provider must read and sign the Emergency Release statement on each Transfusion Tag indicating they accept the risks. When a crossmatch or ABO confirmatory specimen is not available, Blood type O will be dispensed. It is critical that a Blood Bank specimen be collected as soon as feasible. Compatibility testing of dispensed, uncrossmatched blood will be done. A blood bank tech will communicate any known critical information for a patient which could impact blood availability.

Kent Medical Executive Committee approved Guidelines for Transfusion

Blood Component	Transfusion Indication Guidelines – used for internal quality audits	Cerner– Reason for the transfusion order options
Red Blood Cells	Hgb < 7g/dL or Hct <21% Hgb <8 g/dl or Hct <24% in patients with acute coronary syndromes Rapid blood loss (>1500-2000 mL) not responding to appropriate volume resuscitation or with ongoing blood loss Deficit of oxygen carrying capacity	Hgb <7g/dL or Hct <21% Hgb <8 g/dL w/ acute coronary syndromes Blood loss (>1500mL) ongoing/unresponsive Deficit of oxygen carrying capacity Pre-op on hold Other (see clinical notes)
Fresh Frozen Plasma	INR ≥2.0 and invasive procedure (recent, in-progress, planned) INR >1.7 and neurosurgical procedure (recent, in-progress, planned) PT, PTT >1.5 x normal	INR ≥2.0 and invasive procedure INR >1.7 & neurosurgical procedure PT, PTT >1.5 x normal Other (see clinical notes)

Platelets	• Platelet count <10 × 10^3/mcL in a non-bleeding patient with failure of platelet production • Platelet count <20 × 10^3/mcL with signs of hemorrhagic diathesis (petechiae, mucosal bleeding) • Platelet count <20 × 10^3/mcL undergoing elective central venous catheter placement • Platelet count <50 × 10^3/mcL with active hemorrhage or recent procedure (recent, in-procedure, planned) • Platelet count <100 × 10^3/mcL in an adult patient who is at risk of intracranial hemorrhage, with active (intracranial) hemorrhage, or undergoing CNS, retinal, or cardiac surgery (recent, in-procedure, planned) • Documented platelet dysfunction	Plt <10×10^3/mcL Plt <20×10^3/mcL & hemorrhagic diathesis Plt <20×10^3/mcL & CV catheter placement Plt <50x10^3/mcL & active hemorrhage/procedure Plt <100×10^3/mcL & intracranial hemorrhage risk Documented platelet dysfunction Other (see clinical notes)
Cryo-precipitate	Fibrinogen <100 mg/dL Fibrinogen <150 mg/dL with active hemorrhage Dysfunction of fibrinogen	Fibrinogen <100 mg/dL Fibrinogen <150 mg/dL with hemorrhage Dysfunction of fibrinogen Other (see clinical notes)