## TITLE: Transfusion of Frozen Plasma to Neonates

**PURPOSE:**

 Frozen Plasma is the plasma separated from whole blood and frozen.

 The product contains all of the clotting factors except platelets.

Frozen plasma has an expiration date of one year from the date of collection. The product must be maintained at –18 degrees or colder during storage and shipment. Before use, frozen plasma has to be thawed at a temperature between 30 C and 37 C and transfused within 5 days after thawing.

**CLINICAL SIGNIFICANCE**

Frozen plasma is often used to replace coagulation factors in newborns, particularly if multiple factors are involved, such as in vitamin K deficiency or hemorrhagic disease of the newborn. The usual dose is 10-15 mL/kg, which should increase factor activity by 10-20% unless there is marked consumptive coagulopathy.

# PERSONNEL:

Medical Technologists

# SPECIMEN:

Necessary only if the Blood Bank has no previous record of the patient. In that case, no special

preparation of the patient is required prior to specimen collection. Blood collected with or without an anticoagulant may be used. (Plain or EDTA microtainer). The blood sample should be tested as soon as possible after collection. If delay occurs, store sample at 2° C to 8° C. Sample can only be used for 3 days from collection time.

# QUALITY CONTROL:

SoftID provides positive patient and specimen identification at the point of care. This effective lab software solution enhances patient safety by accurately identifying the patient and the appropriate lab test and ensuring that patient lab specimens are correctly bar coded and labeled

# REAGENT PREPARATION & EQUIPMENT

1. Helmer Plasma Thawer

**SEPWISE PROCEDURE**

1. When an order is received for neonatal frozen plasma, check the Blood Bank record for cord blood results on the patient.
2. If no record is found have the patient’s blood collected as explained in the procedure No.4840-BB-100, Ordering Blood and Other Components.
3. Type the patient for ABO and Rh.
4. Order a Neo AB Frozen Plasma from Versiti (630-892-7091). These units are Type AB, CMV negative FFP if none are available in the Blood Bank Freezer.
5. Store unit in Blood Bank freezer until transfusion.

When the physician is ready to administer the frozen plasma, remove the frozen plasma from its box, and place bag in a plasma overwrap bag. Thaw in the plasma thawing unit. Affix the appropriate thawed plasma label to the unit of plasma. Labels are located on the shelf behind the blood bank computer. Send an additional label with the product for nursing staff to label the syringe.

NOTE: After thawing, the plasma must be observed for a milky “Chicken Fat” appearance. Evidence of such “hot spots” may indicate denaturation of proteins. Units with this appearance may not be used for transfusion. Another unit will need to be thawed for the patient.

1. Store in refrigerator at 1-6○C until infused.
2. Transfuse within 5 days after thawing.
3. Frozen plasma is dispensed according to Procedure No 4840-BB-400

 See Blood Bank LIS Manual for more information.

# PROCEDURAL NOTES:

Single Donor Frozen Plasma as indicated for the treatment of clotting factor deficiencies when special concentrates are unavailable or when the precise clotting factor deficiency has not been identified.

# REFERENCES:

Hospital Service Manual, Heartland Blood Center

Standards for Blood Banks and Transfusion Service 30th Edition, 2015.

AABB Technical Manual 18th Edition, 2014.