Lab Dept:	**Transfusion Services**
Test Name:	**CRYOPRECIPITATE TRANSFUSION**

General Information

Lab Order Codes:	TCRY
Synonyms:	Antihemophilic Factor (AHF); Antihemophilic Globulin (AHG); Cryo
CPT Codes:	P9012 – Cryoprecipitate, each unit
Test Includes:	Cryoprecipitate is a component prepared by thawing a unit of fresh frozen plasma at 4ºC and then recovering the cold-precipitated factor VIII protein by centrifugation. The usual unit contains an average of 80 units of factor VIII and at least 150 mg of fibrinogen in about 15 mL of plasma. Cryo5 is produced by pooling 5 standard units of cryoprecipitate. One Cryo5 equals at least 5 standard units of cryoprecipitate in its composition of factor VIII and fibrinogen.

Logistics

Test Indications:	See Guidelines for the Transfusion of Blood Components. Treatment of congenital and acquired deficiency of fibrinogen, hemophilia A, von Willebrand's disease, and factor XIII. Small amounts of cryoprecipitate are also used to prepare "fibrin glue", to aid in surgical hemostasis. Cryoprecipitate contains a significant quantity of fibrinogen and may be used for treatment of hypofibrinoginemia under certain circumstances. Cryoprecipitate rather than antihemophilic concentrate should be given for treatment of von Willebrand's disease or for classical hemophilia when the need for treatment occurs only occasionally. Also, DDAVP® should be considered for treatment of von Willebrand's disease and mild hemophilia. Cryoprecipitate is different than factor VIII concentrate. Factor VIII concentrate is a lyophilized product with much high factor VIII activity than cryoprecipitate. Cryoprecipitate may be used for temporary treatment of bleeding tendency in uremia.
Lab Testing Sections:	Transfusion Service
Phone Numbers:	MIN Lab: 612-813-6824 STP Lab: 651-220-6558
Test Availability:	Daily, 24 hours
Turnaround Time:	30 minutes

Standard Dose/Volume:	1 unit cryoprecipitate per 5 kg body weight <1 kg = 15 mL/kg
Rate of Infusion:	1 – 2 mL per minute (1 unit of cryo is approximately 18 mL)
Administration:	Must be administered through a blood component administration filter. Volumes ≤3 units may be issued by the Transfusion Service in a prefiltered syringe.
Crossmatch:	Should be ABO compatible. Rh need not be considered. Crossmatch is not required.
Irradiation:	Not required
Order Instructions:	Indicate the number of units needed; time and date needed; and indication for transfusion.
Expiration:	Expiration date: 6 hours after thawing, 4 hours after pooling or syringing

Specimen

Specimen Type:	Refer to ABO/Rh if patient testing is required.
Patient Preparation:	The patient must have a Medical Records band for checking against the component Unit Tag prior to administration.
Sample Rejection:	Requests may be questioned if coagulation studies are normal.

Interpretive

Limitations:	Cryoprecipitate should be ABO compatible with the patient's red cells.
Methodology:	Frozen at -18ºC or lower, Cryoprecipitate has a shelf life of 1 year. Thawed at 37ºC with agitation in a waterbath, using a plastic overwrap. Thawing requires 10-20 minutes depending on the number of units being thawed. Once thawed, store at room temperature. Transfuse within 6 hours of thawing or 4 hours of pooling or syringing.
Contraindications:	Do not use unless laboratory or clinical studies indicate a specific coagulation defect for which cryoprecipitate is appropriate. **Risks include:** **--** Disease transmission (Hepatitis B, C and HIV) **--** If a large volume of ABO incompatible cryoprecipitate is used, the patient may develop a positive direct antiglobulin (Coombs) test, mild hemolysis or inhibitors to Facto VIII.

References:

Circular of Information of the Use of human Blood and Blood Components (2002), AABB and American Red Cross, America's Blood Center