Lab Dept: Transfusion Services

Test Name: FFP/FP (THAWED PLASMA) TRANSFUSION

General Information

Lab Order Codes: TFFP

Synonyms: Fresh Frozen Plasma; FFP; Frozen Plasma; FP; Fresh Frozen; Thawed Plasma; TPL

CPT Codes: P9017 – FFP
P9059 - FP

Test Includes: Plasma from a unit of whole blood is separated from the red blood cells within 8 hours of collection (FFP), or 24 hours of collection (FP), and frozen rapidly. Volume approximately 200 - 300 mL

Logistics

Test Indications: Refer to Guidelines for the Transfusion of Blood Components.

Useful for the treatment of coagulation factor deficiencies for which specific factor concentrates are not available, and for massive acute blood loss with massive red cell transfusion.

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 - 40 minutes

Standard Dose/Volume:

Patient Weight:	Std Dosage:
<20 kg	10 – 20 mL/kg
20 – 40 kg	1 adult unit
>40 kg	2 adult units

Rate of Infusion: 1 – 2 mL/minute

Administration:	**--** AVI pump with 150 – 260 micron blood component administration set. **--** Volume ≤60 mL may be issued by the Transfusion Service in prefiltered syringes. Use a syringe pump.
Crossmatch:	Thawed Plasma must be ABO compatible. Rh need not be considered. Type and Screen or Crossmatch is not required.
Irradiation:	Not required
Order Instructions:	Indicate volumes in mL's or number of units needed; time and date needed; and indication for transfusion.
Expiration:	5 days after thawing if maintained in a closed system, or within 24 hours if entering the system. Aliquoted Thawed Plasma transfusions must begin within 4 hours of preparation.

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 and the Transfusion Request Order Form prior to administration. Use coagulation studies as a guide to the transfusion of Thawed plasma.
Sample Rejection:	Request may be questioned if coagulation studies are normal.

Interpretive

Limitations:	The use of Thawed plasma can cause hypervolemia in a normovolemic patient. Cryoprecipitate is a better source of fibrinogen.
Methodology:	Frozen at -18ºC or lower, FFP/FP has a shelf life of 1 year. Thawed at 37ºC with agitation in a waterbath, using a plastic overwrap. Thawing requires 15-30 minutes depending on the number of units being thawed FFP/FP is relabeled as Thawed Plasma. Once thawed, store in Blood Bank refrigerator and transfuse within 5 days if maintained in a closed system, or within 24 hours if the system is entered.

Contraindications:

Do not use Thawed Plasma prophylactically to prevent dilutional coagulopathy in large transfusions.

Do not use Thawed Plasma as a plasma expander; consider crystalloids or albumin as an alternative.

Specific therapies for defined coagulopathies, such as cryoprecipitate or specific factor replacement in hemophilia A or von Willebrand's disease should be given instead of Thawed Plasma when appropriate.

The use of Thawed Plasma will be audited if the INR is <1.4 or the activated partial thromboplastin time is <51 seconds unless there is abnormal bleeding. Additional Information Hazards:

Risks include:

-- Risk of disease transmission (Hepatitis B, C and HIV)
-- Plasma volume overload.
-- Antibody to A antigen (anti-A) and/or B antigen (anti-B).
-- Anaphylaxis in IgA deficient recipients. Although Thawed Plasma is essentially a cell-free product, it does contain plasma proteins (antigens). Recipients may have fever and mild to severe allergic reactions.

References:

Circular of Information of the Use of human Blood and Blood Components (current edition) AABB and American Red Cross, America's Blood Centers