

Commercially Manufactured Plasma Derivative Products

Product Description	Indications	Approx. Vol	Administration	Patient Monitor	Storage
A. ALBUMIN <ul style="list-style-type: none"> • Ordered according to gm%. • Available from Pharmacy. • 3-5 yrs (shelf life). 	<ul style="list-style-type: none"> • Blood volume expansion. • Replacement of protein. 	<ul style="list-style-type: none"> • 50-250 ml. 	<ul style="list-style-type: none"> • See package insert, formulary, or PDR. 	<ul style="list-style-type: none"> • No hepatitis risk. 	<ul style="list-style-type: none"> • Room temperature.
IMMUNOGLOBULINS					
A. RH IMMUNE GLOBULIN (RHOGM[®]) <ul style="list-style-type: none"> • Concentrated solution of gamma globulin with anti - Rh₀ (D) activity. 	<ul style="list-style-type: none"> • To prevent formation of anti-D in Rh negative persons who have received Rh positive red blood cells because of: transfusion of platelets or RBC. • Pregnancy <ol style="list-style-type: none"> a) who have delivered an Rh₀ (D) positive infant, or: b) Infant whose Rh type is unknown or cannot be determined. c) 300 micrograms of Rh globulin given to antepartum patients, - all Rh negative nonsensitize of patients having: <ol style="list-style-type: none"> 1) genetic amniocentesis 2) diagnostic amniocentesis 3) at 28 weeks of pregnancy 4) with vaginal bleeding 	<ul style="list-style-type: none"> • 300 microgram dose in safety needle syringes. 	<ul style="list-style-type: none"> • Given I.M. within 72 hrs following delivery or invasive procedure or vaginal bleeding or pt receiving Rh positive components. 		<ul style="list-style-type: none"> • Refrigerate.
B. Rhophylac	<ul style="list-style-type: none"> • Treatment of ITP 	<ul style="list-style-type: none"> • Reconstituted to 2.5 mL of 0.9% Sodium Chloride, Injection. Swirl, do not shake, to dissolve. • Dosage varies with person's weight. 	<ul style="list-style-type: none"> • Given IV for the treatment of ITP. May be give IM for the prevention of Rh prophylaxis. • See product circular. • I.M. 	<ul style="list-style-type: none"> • See product circular. 	<ul style="list-style-type: none"> • Use immediately after reconstitution.
C. IMMUNE SERUM GLOBULIN (GAMMA GLOBULIN) IM	<ul style="list-style-type: none"> • Disease prophylaxis. 			<ul style="list-style-type: none"> • See product circular. 	
D. IMMUNE GLOBULIN INTRAVENOUS IV (IV GAMMA GLOBULIN, GAMIMUNE, SANDOGLOBULIN) <ul style="list-style-type: none"> • Available from Pharmacy 50-100 ml single dose vials. • Have an anaphylactic kit available. 	<ul style="list-style-type: none"> • Maintenance treatment of patients unable to produce sufficient amount of IgG antibodies. • May be preferred to that of intramuscular immunoglobulin preparation especially in patients with small muscle mass or with bleeding tendencies in whom I.M. injections are contraindicated. • Congenital agamaglobulinemia immunodeficiency, etc. CONTRAINDICATED in individuals who have had anaphylactic or severe systemic response to Immune Serum Globulin (Human) or have IgA deficiency. 	<ul style="list-style-type: none"> • Usual dose: 100 mg/kg of body weight. 	<ul style="list-style-type: none"> • Administration varies with preparation and manufacturer. See product circular. 	<ul style="list-style-type: none"> • Monitor for signs and symptoms of anaphylactic reactions. • Mild back pain, nausea, flushing have been reported. • If side effects occur, decrease the rate or stop the infusion. • Temperature, BP, P, Resp. baseline and 15 min., then q 15 min. after each rate increase and then q 30 min. during infusion and 30 min. after infusion discontinued. 	

**Commercially Manufactured Plasma Derivative Products
Factor VIII Products**

Product Description	Indications	Approx. Vol	Administration	Patient Monitor	Storage
<p>A. ADVANCED CATEGORY RECOMBINANT F VIII PRODUCTS</p> <ul style="list-style-type: none"> Manufactured and formulated without using any human or animal proteins (no forms of blood products used). Genetically engineered or cloned F VIII which is not derived from animal or human plasma. Available from Pharmacy. See package insert, formulary or PDR. Outdate on bottle. <p>B. RECOMBINANT FACTOR VIII PRODUCTS</p> <p>1. Second Generation</p> <ul style="list-style-type: none"> Manufacturing process uses human or animal proteins (albumin); however, final formulation has no albumin <p>2. First Generation</p> <ul style="list-style-type: none"> Manufacturing process and final formulation uses human and/or animal proteins. Has albumin in final formulation Genetically engineered or cloned F VIII which is not derived from animal or human plasma. Available from Pharmacy. See package insert, formulary or PDR. Outdate on bottle. <p>C. IMMUNOAFFINITY PURIFIED F VIII PRODUCTS</p> <ul style="list-style-type: none"> Pooled products derived from human plasma. Viral attenuation is augmented by pasteurization or solvent detergent treatment. 	<ul style="list-style-type: none"> Hemophilia A or factor VIII deficiencies. Prevention and control of hemorrhagic episodes Perioperative management of patients with hemophilia A <ul style="list-style-type: none"> Hemophilia A or factor VIII deficiencies. Prevention and control of hemorrhagic episodes Perioperative management of patients with hemophilia A <ul style="list-style-type: none"> Hemophilia A or factor VIII deficiencies. Prevention and control of hemorrhagic episodes Perioperative management of patients with hemophilia A 	<ul style="list-style-type: none"> Varies with manufacturer or lot number. <ul style="list-style-type: none"> Varies with manufacturer or lot number. <ul style="list-style-type: none"> Varies with manufacturer or lot number. 	<ul style="list-style-type: none"> Administer within 3 hours of reconstitution. Gently swirl; do not shake vial May be given IV push. As units will vary with lot, give as close to prescribed dose as possible. DO NOT WASTE!! Give entire contents of bottle(s) even if above prescribed dose. <ul style="list-style-type: none"> Administer within 3 hours of reconstitution. Gently swirl; do not shake vial May be given IV push. As units will vary with lot, give as close to prescribed dose as possible. DO NOT WASTE!! Give entire contents of bottle(s) even if above prescribed dose. <ul style="list-style-type: none"> Administer within 3 hours of reconstitution. Gently swirl; do not shake vial Draw up with a filtered needle. May be given IV push. As units will vary with lot, give as close to prescribed dose as possible. DO NOT WASTE!! Give entire contents of bottle even if it is above prescribed dose. 	<ul style="list-style-type: none"> Risk of viral contamination via human/animal proteins essentially eliminated. Plasma factor VIII levels Factor VIII inhibitor levels; if inadequate response to appropriate doses <ul style="list-style-type: none"> Risk of viral contamination via human/animal proteins essentially eliminated. Plasma factor VIII levels Factor VIII inhibitor levels; if inadequate response to appropriate doses <ul style="list-style-type: none"> Risk of viral contamination via human/animal proteins essentially eliminated. Plasma factor VIII levels Factor VIII inhibitor levels; if inadequate response to appropriate doses 	<ul style="list-style-type: none"> Refrigeration recommended. <ul style="list-style-type: none"> Refrigeration recommended. <ul style="list-style-type: none"> Refrigeration recommended.

**Commercially Manufactured Plasma Derivative Products
Factor VIII Products (Continued)**

Product Description	Indications	Approx. Vol	Administration	Patient Monitor	Storage
<p>D. INTERMEDIATE OR HIGH PURITY F VIII PRODUCTS DERIVED FROM HUMAN PLASMA</p> <ul style="list-style-type: none"> • Virally attenuated by heat or solvent detergent treatment. • Humate P is rich in Von Willebrand factor and is recommended for treatment of VWD patients <p>E. PORCINE F VIII</p> <ul style="list-style-type: none"> • For use in pts. with F VIII inhibitor. • Not derived from human plasma. 	<ul style="list-style-type: none"> • Hemophilia A or factor VIII deficiencies. • Prevention and control of hemorrhagic episodes • Perioperative management of patients with hemophilia A • Humate P: Prevention and control of bleeding episodes in patients with hemophilia A or with von Willebrand disease. <ul style="list-style-type: none"> • Hemophilia A with inhibitor. 	<ul style="list-style-type: none"> • Varies with manufacturer or lot number. <ul style="list-style-type: none"> • Varies 	<ul style="list-style-type: none"> • Administer within 3 hours of reconstitution. • May be given IV push. • Gently swirl; do not shake vial • As units will vary with lot, give as close to prescribed dose as possible. DO NOT WASTE!! Give entire contents of bottle even if it is above prescribed dose. • See package insert. 	<ul style="list-style-type: none"> • Risk of viral contamination very small. <ul style="list-style-type: none"> • No risk of transmission of human viruses. 	<ul style="list-style-type: none"> • Refrigeration recommended. <ul style="list-style-type: none"> • Refrigeration

**Commercially Manufactured Plasma Derivative Products
Factor IX Products**

Product Description	Indications	Approx. Vol	Administration	Patient Monitor	Storage
<p>A. RECOMBINANT F IX PRODUCTS</p> <ul style="list-style-type: none"> Genetically engineered or cloned F IX which is not derived from animal or human plasma. No human blood components in manufacturing or final formulation. Available from Rx <i>Rixubis</i>TM <i>Benefix</i>[®] 	<ul style="list-style-type: none"> Hemophilia B or factor IX deficiencies. Prevention and control of bleeding episodes in patients with hemophilia B Perioperative management in adults with hemophilia B 	<ul style="list-style-type: none"> Varies 	<ul style="list-style-type: none"> Allow powder and diluent to reach room temperature prior to reconstitution Administer within 3 hours of reconstitution. See package insert, formulary, or PDR 	<ul style="list-style-type: none"> Very small risk of viral transmission. 	<ul style="list-style-type: none"> Refrigeration recommended.
<p>B. COAGULATION F IX PRODUCTS</p> <ul style="list-style-type: none"> Pooled plasma product, virally attenuated. Much less risk of thrombotic occurrences than with factor IX complex products. <i>Alphanine SD</i> <i>Mononine</i> 	<ul style="list-style-type: none"> Hemophilia B or factor IX deficiencies. Prevention and control of bleeding episodes in patients with hemophilia B. 	<ul style="list-style-type: none"> Varies 	<ul style="list-style-type: none"> Allow and diluent to reach room temperature prior to reconstitution Administer within 3 hours of reconstitution. See package insert. 	<ul style="list-style-type: none"> Very small risk of viral transmission. 	<ul style="list-style-type: none"> Refrigeration recommended.
<p>C. F IX COMPLEX CONCENTRATES (PROTHROMBIN COMPLEX CONCENTRATES)</p> <ul style="list-style-type: none"> Pooled plasma product, virally attenuated. Contain factor II, VII & X in addition to factor IX. Not to be used in patients requiring large or repeated doses due to the risk of thromboembolic complications. <i>Kcentra</i>TM 	<ul style="list-style-type: none"> Hemophilia B or factor IX deficiencies Treatment of hemorrhagic episodes 	<ul style="list-style-type: none"> Varies 	<ul style="list-style-type: none"> Administer within 4 hours of reconstitution Discard partially used vials; for single use only Reconstitute with 20 mL of provided diluent (sterile water for injection, USP) Record lot number in patient's medical record See package insert. 	<ul style="list-style-type: none"> Very small viral risk. 	<ul style="list-style-type: none"> Room temp until reconstitution

**Commercially Manufactured Plasma Derivative Products
Patients with Factor VIII or IX Inhibitors**

Product Description	Indications	Approx. Vol	Administration	Patient Monitor	Storage
A. RECOMBINANT F VIIa (ACTIVATED) <ul style="list-style-type: none"> Genetically engineered or cloned activated F VII that is not derived from animal or human plasma. No human blood components in manufacturing or final formulation Available from Rx Novoseven RT 	<ul style="list-style-type: none"> Patients with factor VIII or factor IX inhibitors. 	<ul style="list-style-type: none"> Varies 	<ul style="list-style-type: none"> Novoseven: Administer within 3 hours of reconstitution. Inject diluent against side of vial; do not inject diluent directly on powder Reconstitute ONLY with the histidine diluent provided with NovoSeven Other products vary; See package insert 	<ul style="list-style-type: none"> Very low risk of viral transmission. 	<ul style="list-style-type: none"> Refrigeration recommended. Outdate on bottle
B. ACTIVATED F IX COMPLEX PRODUCTS <ul style="list-style-type: none"> Pooled plasma product, virally attenuated. Purposely activated so that product contains some F IX, F X, etc. in active form. To be used in INHIBITOR PATIENTS ONLY. FEIBA® NF 	<ul style="list-style-type: none"> Patients with factor VIII or factor IX inhibitors. Some specific products can be used in deficiencies of factors II, VII or X. Not all products can be used as the amounts of II, VII & X vary from product to product. 	<ul style="list-style-type: none"> Varies 	<ul style="list-style-type: none"> FEIBA: Reconstitute with Sterile Water for Injection (warmed to room temperature) using needleless transfer device (both supplied); swirl gently Administer within 3 hours of reconstitution. Other products vary; See package insert 	<ul style="list-style-type: none"> Very low risk of viral transmission. 	<ul style="list-style-type: none"> Refrigeration recommended.

Product Description	Indications	Approx. Vol	Administration	Patient Monitor	Storage
A. ANTITHROMBIN III <ul style="list-style-type: none"> Thrombate III – Pooled plasma product, virally attenuated. ATryn – Genetically engineered or cloned activated antithrombin that is not derived from animal or human plasma. No human blood components in manufacturing or final formulation. Exposed to goat/goat milk proteins during manufacture. 	<ul style="list-style-type: none"> Thrombate III – Treatment of hereditary antithrombin deficiency in connection with surgical or obstetrical procedures or when a thromboembolism occurs. ATryn (Recombinant) – Prevention of post-operative and peri-partum antithrombotic events in patients with hereditary antithrombin deficiency. 	<ul style="list-style-type: none"> Varies 	<ul style="list-style-type: none"> Administer within 3 hours after reconstitution Reconstitute with Sterile Water for injection Filter the reconstituted product through the sterile filter needle provided See package insert 	<ul style="list-style-type: none"> Very low risk of viral transmission. 	<ul style="list-style-type: none"> Do not refrigerate after reconstitution

Updated 11/2013

Documentation: Lot #(s), expiration date, product name, and # of units infused

Editor: Phyllis Patterson, MS, RN, CS,AOCN, Deb Wagner, PharmD
References: Harriet Lane Handbook Peds, , Transfusion & Apheresis Services
Reviewer: Lynda Dettling, BSN, RN, Suzanne Butch, Jim Munn, Diana Mathis