

CALGARY LABORATORY SERVICES

BLOOD COMPONENT/PRODUCT REQUISITION – NEONATAL/PEDIATRIC

ADDITIONAL ORDERING INSTRUCTIONS AND GUIDELINES

Indications for:

Irradiated Blood Products

- Bone Marrow Transplants and potential Bone Marrow Transplants
- Solid Organ Transplants
- Aplastic Anemia, Congenital Bone Marrow Failure Syndromes such as Diamond Blackfan Anemia
- Neonates less than 4 months of age
- Intrauterine transfusion (also CMV negative)
- Patients with congenital immunodeficiencies

*****All red cell and platelet products produced by Canadian Blood Services are leukoreduced by filtration, and are therefore considered to be CMV Safe

Albumin

5% Albumin

- Is an iso-oncotic solution that increases circulating blood volume only by the volume infused.
- Used for fluid replacement when volume expansion is not required.

25% albumin

- Is a hypertonic solution that increases circulating blood volume by drawing fluid from interstitial spaces.
- Infusion of 100 mLs increases plasma volume by 450-500 mLs.
- Usually restricted to use in patients with liver failure.

*****Administering 25% Albumin instead of 5% in error could result in circulatory overload

IVIG

- Contains a distribution of IgG subclasses similar to that found in normal plasma
- Indications: Primary Humoral Immunodeficiency (PID), Secondary Immune Deficiencies, neurological disorders, hematological disorders, rheumatologic disorders and infectious diseases (TSS or HIV)

*****For rates of infusion see specific brand product inserts and nursing guidelines

Cytogam (CMV IVIG) available for specific treatment of CMV infections in transplant patients

Rh Immune Globulin (RhIg)

- Recommended to prevent alloimmunization in Rh(D) negative patients following exposure to Rh(D) positive RBC, through either pregnancy or transfusion (including transfusion of platelets from Rh(D) positive donors)
- When used in ITP treatment caution must be taken regarding the severe hemolysis that can occur, patients should be monitored closely. ITP candidates for this treatment must be Rh (D) positive and have a functioning spleen.

Dosage:

- Normal Pregnancy prophylaxis 300 mcg (1500 units) vial
- A 300 mcg (1500 units) is sufficient to counteract the immunizing effects of 15 mL of Rh(D) positive red cells

Hepatitis B Immune Globulin

- 5 mL vial (dose \leq 220 units/mL) recommended for post exposure prophylaxis for persons exposed to Hep B via transfusion, sexual or occupational contact.
- 0.5 mL vial (dose \geq 220 units/mL) available for neonates whose parents or primary caregiver has acute Hep B or is a carrier of Hep B. Neonatal Hep B vaccine also available.
- 5 mL vial (dose \geq 312 units/mL) high dose available for post liver transplant prophylaxis

Varicella Zoster Immune Globulin (VZIg)

- Recommended for passive immunization of exposed patients who are at a high risk of complications from Varicella zoster. The high risk group includes:
 - Immunosuppressed or immunocompromised neonates whose mothers have Varicella exposure 5 days prior and up to 48 hrs post delivery
 - Premature infants less than 28 weeks
 - Non-immune pregnant women
 - Bone Marrow/Stem Cell transplant patients
 - Patients with Significant Cellular Immune Deficiencies
- Should be administered within 96 hrs of exposure. Maximum dose is 625 units (5 vials of 125 units)