Guidelines for Administration of
Intravenous Immune Globulin (IVIG)
1.0 Policy Statement

1.1 To ensure that Intravenous Immune Globulin (IVIG) is safely administered to patients for clinically indicated conditions with a goal to optimize patient outcomes.

1.2 To ensure appropriate utilization according to published guidelines.

2.0 Definitions

2.1 Blood Product: a therapeutic product derived from human blood or plasma and produced by a manufacturing process.

2.2 Compatibility Label / Tag: tag or label attached to the blood product that has been designated for a specific recipient, specifying information that indentifies the blood product for that recipient.

2.3 Immune Globulins: antibodies found in blood that fight off infectious agents, such as viruses and bacteria.

2.4 Intravenous: a method of administration within a vein.

2.5 Lot Number: The unique number assigned by the manufacturer when preparing a fractionated blood product. The number is located on both the box and the vial.

2.6 Transfusionist: individual who administers a blood product transfusion.

2.7 Transfusion Laboratory: Hospital Blood Bank.

2.8 Vital Signs: The measurement of temperature, pulse, respiration rate and blood pressure.
3.0 Required Documents

3.1 NL PBCP Policy for Blood Component and Blood Product Administration.

3.2 NL PBCP Policy and Standard Operating Procedure for Review and Approval of Requests for Intravenous Immune Globulin for Adult Patients.

4.0 General Information

4.1 IVIG Products

4.1.1 The following IVIG products are currently available from CBS:
- Gammagard S/D
- Gammagard Liquid
- Gamunex
- IGIVnex
- Privigen

4.1.2 Check with the Transfusion Laboratory to determine the products available in the facility where the recipient is being transfused.

4.2 Approved medical conditions for IVIG:

4.2.1 Health Canada has approved IVIG for the following medical conditions:
- Primary Immune Deficiency
- Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)
- Idiopathic Thrombocytopenic Purpura
- Pediatric Human Immunodeficiency Virus
- Allogenic Bone Marrow Transplantation
- B-Cell Chronic Lymphocytic Leukemia

4.2.2 Refer to indications and approved guidelines on IVIG Request Form in the NL PBCP Policy and Standard Operating Procedure for Review and Approval of Requests for Intravenous Immune Globulin for Adult Patients.
4.2.3 Ensure orders not meeting the approved conditions: “Other Indications” meet prerequisites outlined on IVIG Request Form and/or follow the IVIG Process Flowchart in the NL PBCP Policy and Standard Operating Procedure for Review and Approval of Requests for Intravenous Immune Globulin for Adult Patients.

4.3 Special Circumstances

4.3.1 IVIG may be transfused in special populations which include:
- Pregnant Women
- Nursing Women
- Pediatrics (1-18)
- Geriatrics (≥ 65 years of age)

Refer to specific product insert or monograph for further implications.

4.4 Informed and Written Consent:

The recipient shall receive information that includes a description of the blood product, the associated risks and benefits as well as alternatives to transfusion if appropriate. An opportunity to ask questions and obtain satisfactory answers will be provided. Written consent shall be obtained for the blood product transfusion and the recipient shall be notified in writing that they have received blood products.

4.5 Contraindications:

IVIG is contraindicated in recipients:
- known to have had a previous history of a severe systemic or anaphylactic response to IVIG
- known to have anti-IgA antibodies with selective IgA deficiencies

Privigen is also contraindicated in recipients with hyperprolinemia.

NOTE: IVIG interferes with the efficiency of live vaccines.
5.0 Process or Procedure

5.1 Ordering Intravenous Immune Globulin (IVIG)

5.1.1 The physician shall ensure the following is legibly documented when requesting IVIG:
- Written consent or refusal for IVIG transfusion
- Completion of the request for IVIG form
- Type and dosage of IVIG being transfused
- Rate and duration of IVIG transfusion
- Pre / Post transfusion medication orders related to the transfusion of IVIG

5.1.2 The Transfusionist’s responsibility shall include:
- Confirmation that the IVIG Request form has been completed and signed by the physician.
- Confirmation that the consent to transfuse IVIG has been signed by the patient.
- Confirmation that the physician order accurately identifies the recipients name, identification number, particular IVIG product, rate and duration of infusion, date and time.
- Fax completed IVIG request form to the transfusion laboratory and enter request in Meditech where applicable.

5.2 Identification

5.2.1 Ensure unequivocal identification of the recipient and IVIG throughout the transfusion.

5.3 Administration of Intravenous Immune Globulin (IVIG).

5.3.1 IV Access, Administration Sets and Compatible Solutions

5.3.1.1 Administer IVIG intravenously via an approved intravenous infusion pump.

5.3.1.2 Transfuse IVIG using sterile administration sets.
GUIDELINES FOR ADMINISTRATION OF INTRAVENOUS IMMUNE GLOBULIN (IVIG)

NOTE: Refer to product insert or monograph for specific administration set. Some IVIG products require inline filter administration sets.

5.3.1.3 Connect IVIG administration sets directly to the IV access site.

5.3.1.4 Begin IVIG within thirty (30) minutes from the time the product is released from temperature controlled storage.

5.3.1.5 Administer IVIG at room temperature. The transfusion shall not exceed four (4) hours from the time of issue from temperature controlled storage.

5.3.1.6 Do not add medication directly to IVIG or to the administration set containing IVIG.

**Exception:** 5% dextrose in water shall be used when administering IVIG. Refer to specific product inserts or monographs for compatible IV solutions.

5.3.1.7 Visually inspect IVIG container to ensure it is intact, inspect IVIG solution for discoloration, turbidity and particulate matter immediately before issue and document inspection.

**NOTE:** Do not use any vial that has been punctured, frozen or if the solution is turbid.

5.3.1.8 Check the expiry date to ensure the IVIG is not outdated.

5.3.1.9 Reconstitute IVIG products that require reconstitution according to the package insert.

**NOTE:** Do not shake.

5.3.1.10 Transfuse IVIG as indicated on the physician’s request order and according to the product insert. The dose for IVIG and the number of treatments is dependent on the recipient’s weight, clinical indication and medical condition.
5.3.1.11 Return IVIG product to the Transfusion Laboratory as soon as possible, if decision is made not to transfuse.

5.4 Transfusion of IVIG Products

5.4.1 Monitor and document pre-transfusion vital signs prior to transfusion of IVIG. These include temperature, pulse, respiration rate and blood pressure.

5.4.2 Complete the compatibility label / tag leaving it attached to the IVIG product until the transfusion is complete.

5.4.3 Confirm and document identifying information linking the recipient and IVIG product immediately prior to IVIG transfusion in the presence of the recipient.

5.4.4 Ensure there is an identical match between the recipient, IVIG product and compatibility label/tag for the following:

   Recipient’s name and identification number shall match on
   • Compatibility label / tag attached to IVIG product
   • Recipient’s Health Record
   • Recipient’s armband
   • If conscious, the recipient should be requested to state their full name

   IVIG product lot/unit number shall match on the
   • Compatibility/label tag attached to IVIG
   • IVIG product label on the box
   • IVIG product label on the bottle
   • Confirm that the IVIG product has not expired

5.4.5 Do not transfuse IVIG if a discrepancy is identified until the discrepancy is resolved.
5.4.6 Inform the recipient of the purpose of the IVIG transfusion and instruct the recipient to notify the nurse if any of the following complications occur: fever, chills, flushing, nausea, anxiety, headache, dizziness, joint and or muscle pain, abdominal cramping, rash, urticaria, dyspnea, aseptic meningitis, thrombotic events, anaphylaxis, hemolysis and renal dysfunction.

5.4.7 Document the date and start time of the transfusion.

5.4.8 Monitor and document recipient vital signs before, during and after the IVIG transfusion. Vital signs shall be monitored and recorded before the transfusion begins, within 15 minutes of starting the infusion, prior to each rate increase, every hour during the transfusion and 30 minutes after the transfusion.

5.4.9 Infuse IVIG product according to IVIG product insert instructions or physician’s order. Start at the initial rate gradually increasing to manufacturer’s recommended maximum rates if tolerated. Refer to the product monograph for subsequent dosage rates of infusion.

5.4.10 Assess the recipient during the transfusion for signs and symptoms of adverse reactions that include but are not limited to the following complications: fever, chills, flushing, nausea, anxiety, headache, dizziness, joint and or muscle pain, abdominal cramping, rash, urticaria, dyspnea, aseptic meningitis, thrombotic events, anaphylaxis, hemolysis and renal dysfunction.

**NOTE:** Refer to Appendix 2 (Algorithm for Suspected Transfusion Reactions) found in the NL PBCP Policy for Blood Component and Blood Product Administration.

5.4.11 If any adverse transfusion reactions are observed the following actions must be taken:
- Slow down or Stop the transfusion immediately
- Keep lines open with 5% dextrose in water (D5W)
- Confirm the name of the recipient and identification number on the recipient’s armband against the compatibility tag/label and document.
- Notify the physician
- Check and document vital signs
5.4.12 Restart the infusion at a rate where no symptoms are observed once non-specific symptoms have subsided or symptomatic treatment has been initiated.

5.4.13 Do not restart IVIG infusion if anaphylaxis occurs; Epinephrine should be available in the treatment area for the treatment of acute anaphylactic reaction.

5.5 Post Administration

5.5.1 Flush IV line with 5% dextrose in water (D5W) or compatible solution following the transfusion.

5.5.2 Disconnect the IVIG administration set.

5.5.3 Document post transfusion information on the compatibility label/tag and recipient’s chart following completion of the transfusion.

5.5.4 Return the laboratory portion of the compatibility label/tag to the Transfusion Laboratory according to policy.

5.5.5 Monitor the recipient for at least 30 minutes after the transfusion.

5.5.6 Dispose of IVIG product bottles or containers and tubing in compliance with standard precautions according to hospital policy and procedure.

6.0 Records Management

6.1 Records of final disposition of the blood product shall be retained indefinitely.

6.2 Transfusion records shall be retained indefinitely in the recipient medical chart.

6.3 Serious adverse reaction records shall be retained indefinitely.

6.4 Temperature monitoring records of blood storage devices shall be kept for a minimum of five years.
6.5 Refer to CSTM Standards Appendix A and CSA Standards Table 4 for additional record retention requirements.

7.0 References


7.6 Callum JL, Pinkerton PH. Bloody Easy 2 blood transfusion, blood alternatives and transfusion reactions, a guide to transfusion medicine. 2nd ed. Toronto (ON): Sunnybrook and Women’s College Health Sciences Centre; 2005.


7.16 Overview of intravenous immunoglobulin for idiopathic thrombocytopenia purpura and chronic inflammatory demyelinating polyneuropathy (Technology Overview Number 50). Ottawa: Canadian Agency for Drugs and Technologies in Health; 2009.


7.18 Western Health Regional Health Authority. Intravenous immune globulin (IVIG) – blood product administration, Number: 15-01-620. Corner Brook (NL).