Clinical Practice Considerations: Intravenous Immunoglobulin (IVIg) Brand Switching

The National Emergency Blood Management Committee (NEBMC) continues to meet regularly to discuss the IVIg supply forecast together with Canadian Blood Services. The National Advisory Committee on Blood and Blood Products (NAC) continues to support implementation of the actions detailed in the communication issued by the NEBMC alongside a Canadian Blood Services Customer Letter (CL #2020-44) on October 2, 2020.

We anticipate that the heightened attention given to IVIg stewardship and support of utilization programs within provincial jurisdictions will help mitigate any severe IVIg shortage nationwide. The reduced supply of some IVIg brands and new IVIg supplier contracts to augment the overall IVIg supply has led to a shift in the IVIg brand split available from Canadian Blood Services, as detailed in the Customer Letter CL #2020-50. Therefore, shortages of specific IVIg brands and vial sizes are anticipated.

Canadian Blood Services has recently announced in CL #2021-10 that regular reports summarizing the IVIg brand split of products issued to hospitals will be provided. This will allow for monitoring of local progress towards achieving target brand share splits.

The NAC would like highlight the following considerations to hospital clinical services to aid in the possible variation in IVIg brand availability from Canadian Blood Services:

- IVIg brands other than Gammagard Liquid® should be selected for new patients or those requiring intermittent IVIg use for acute exacerbations of chronic disease conditions to preserve available Gammagard Liquid® supply.

- Local/Jurisdictional Transfusion Medicine Services are strongly encouraged to review IVIg brand utilization by patients receiving chronic infusions and identify potential candidates to proactively switch IVIg brands away from Gammagard Liquid® as a means of balancing local utilization based future IVIg brand availability (consult Canadian Blood Services CL #2020-50 for details). Patients identified should be brought to the attention of the prescribing physician in writing in accordance with local processes, as appropriate.

- Patients who have been identified to have history of IVIg adverse reactions, but demonstrated tolerance to specific IVIg brands should preferentially **not** undergo IVIg brand switching.

- If possible, patient transition between different brands should be minimized. In situations where an IVIg brand switch is necessary for any patient, a communication must be sent from the transfusion medicine service to the the IVIg infusion clinic and prescribing physician, as per local policy. This communication must emphasize any potential impact to the IVIg infusion duration of the first exposure to a new IVIg brand.
• The use of a standard IVIg infusion rate table applicable to all brands of 10% IVIg is strongly recommended. Standard infusion protocols help avoid confusion in terms of administration rates at the bedside. Examples of generic 10% IVIg infusion rate tables for adult and pediatric patients currently in use within Canadian jurisdictions include:

  o British Columbia
  o Alberta
    ▪ Adult: [https://www.albertahealthservices.ca/assets/wf/lab/wf-lab-clin-tm-adult-rate-ivig.pdf](https://www.albertahealthservices.ca/assets/wf/lab/wf-lab-clin-tm-adult-rate-ivig.pdf)
    ▪ Pediatric: [https://www.albertahealthservices.ca/assets/wf/lab/wf-lab-clin-tm-ped-rate-ivig.pdf](https://www.albertahealthservices.ca/assets/wf/lab/wf-lab-clin-tm-ped-rate-ivig.pdf)
  o Saskatchewan → see Saskatoon IVIG Infusion Order Set ADULT and PEDIATRIC
    ▪ [https://saskblood.ca/programs/sk-ivig-program/](https://saskblood.ca/programs/sk-ivig-program/)

• To minimize risk of infusion reaction, the maximum infusion rate of any IVIg brand at initial exposure should not exceed that of the manufacturer recommendation (4-5 mL/kg/h in generic infusion tables).
  o Patients receiving chronic IVIg will require a longer infusion duration upon first exposure to a different IVIg brand while the patient tolerance of this product is confirmed.
  o Appropriate communication with patients, outpatient infusion clinic booking staff and nurses is essential to ensure adequate infusion time is allocated for a new IVIg brand.
    ▪ For sample resources, please consult the following documents on the NAC website ([https://nacblood.ca/resources/shortages-plan/index.html](https://nacblood.ca/resources/shortages-plan/index.html)) which may be customized for hospital or regional use:
      • Template communication to the Prescribing Physician: IVIg Brand Switching for Chronic IVIg Infusion Patients
      • Template communication to the Patient: Notification of IVIg Brand Switch
      • Fact Sheet: Canadian Ig Supply and IVIg Brand Switching
      • Transfusion Safety: Notice of IVIg Brand Switch at Product Issue

The NAC would like to underscore that communication is key to reduce confusion and frustration by patients and clinical care providers. It is the responsibility of each hospital and jurisdiction to develop a mechanism of communication with patients, physicians and nurses when IVIg brand switching is required to preserve IVIg supply and limit clinical care impacts.

Questions or concerns may be directed to your NAC Provincial Representative through your local hospital transfusion medicine service.