ALBERTA PRECISION LABORATORIES
Leaders in Laboratory Medicine

Laboratory Bulletin

DATE:	2021 May 31
TO:	Alberta Physicians, ZEOCs, Outpatient / IV Therapy Clinics
FROM:	Alberta Precision Laboratories (APL)
RE:	Global Shortage of Intravenous Immunoglobulin (IVIg)

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Key Message

- Due to impending shortages in the global supply of Immunoglobulin (Ig) products, the National Emergency Blood Committee and Canadian Blood Services have been developing mitigation plans for short and long-term supply challenges.
- At this time, Canadian Blood Services has informed us that subcutaneous immunoglobulin (SCIg) is in good supply to meet the current demand. However, there is concern about the future supply of intravenous immunoglobulin (IVIg). Some brands may be at higher risk of shortages than others (e.g. Gammagard Liquid®).
- To ensure that we will have sufficient quantities of IVIg for all Albertans who need this product, several mitigation strategies have been recommended by the National Emergency Blood Management Committee for implementation in the provincial / territorial jurisdictions served by Canadian Blood Services. Some of these new, or renewed processes, are highlighted below. These will be implemented in Alberta to conserve product.

Action Required

For patients currently receiving Ig therapy:

- **Review all patients for whom you are currently prescribing Immune Globulin.**
- **Ensure that ongoing therapy is still required.**
- **Stop therapy in those who no longer require it.**
- **Review dosing and frequency for those who require ongoing Immune Globulin to ensure that the minimal effective dose is being ordered.**
- **Be aware that brand switching may be necessary in some patients.**

For all NEW patients or new Ig requests:

- **Ensure that requests are submitted using the Provincial IVIG Request form (unless the request is submitted via Connect Care) to the Transfusion Service prior to booking the patient for Ig infusion.**
  - https://www.albertahealthservices.ca/lab/Page10035.aspx
- **Requests will NOT be approved unless the indication, total dose, frequency, patient height and weight are provided by the ordering prescriber.**

Background

- **Provinces need to ensure appropriate utilization of Ig to ensure that those who truly need the product can continue to receive it.**

- In Alberta, prescribers of Ig are expected to follow the Prairie Collaborative's Criteria for the Clinical Use of Immune Globulin. https://www.albertahealthservices.ca/lab/Page10035.aspx. Blood banks in the province will be screening all Ig requests to ensure adherence with these criteria. If you have a patient who you believe requires Ig for a condition that is not captured in this document, please contact your local on-call transfusion medicine physician to obtain approval before booking the patient for their Ig infusion.
- For eligible patients, prescribers should utilize the adjusted body weight dosing for Ig products. The dose calculator can be found at (Forms & Other Resources | Alberta Health Services) / IVIG Dosing based on Adjusted Body Weight Calculation (albertahealthservices.ca) or within the IVIg orderable in Connect Care. For patients who are receiving chronic Ig support, prescribers are asked to review whether or not ongoing Ig is still required or whether any modifications can be made to the dose or dosing frequency.
- **Provinces will need to ensure that they can accommodate the brand share splits and vial sizes of the various brands of IVIg available in Canada.**
  IVIg brands other than Gammagard Liquid® will be provided for any new patients.
- Patients who have been on Gammagard Liquid® previously but have not received Ig in the last 8 weeks will be switched to an alternate product. The patient and the infusing department will receive notification at the time of switching. The latter is to ensure that the appropriate modifications to the rate of infusion are implemented for the initial dose of the new product.
- Those on long-term therapy who have had a history of IVIg severe adverse reactions but are currently receiving a product that hey tolerate will not undergo brand switching unless there is no other option available. Many clinicians are not aware that Vanessa's Law requires reporting of adverse events to plasma protein products. Please ensure that any adverse events associated with both IVIg and SCIg are reported to the transfusion service so that that requirement can be appropriately completed.
- The transfusion medicine service will be performing dose rounding to the nearest vial size available to avoid wastage. For most brands, the smaller vial sizes are 2, 2.5 or 5 g. Larger vial sizes are often in shorter supply so a mix of vial sizes may be required to fulfill the dose.
- **Provinces will need to review and be able to implement an Ig shortage plan.** A subcommittee of Alberta's Provincial Emergency Blood Management Committee has been reviewing the National Plan for Management of Shortages of Immunoglobulin Products (National Blood Shortages Plan (NAC & CBS) (nacblood.ca)) to ensure that it is applicable to Albertans. Potential pharmacologic alternatives may be applicable to specific disease states.

Inquiries and feedback may be directed to

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- Glenna Laing, Alberta Health Director Divisional Services and Programs (glenna.laing@gov.ab.ca).

This bulletin has been reviewed and approved by

- Dr. Susan Nahirniak, APL Transfusion Medicine Section Chief