ALBERTA PRECISION LABORATORIES
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Laboratory Bulletin

DATE:	20 March 2023
TO:	Provincial: Physicians, Nurses, and Healthcare Practitioners
FROM:	Transfusion and Transplanation Medicine Provincial Program
RE:	**Changes to the Provincial Plasma Inventories**

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Key Message

Effective April 1st, 2023, there will be further rollout of the pathogen reduction strategy of transfusable inventory with increased availability of Solvent Detergent Plasma (Octaplasma or S/D plasma) across Canada. At the same time, there will be roll out of low titre group A frozen plasma (FP) as an alternate source of "universal" plasma for patients weighing greater than 25 kg. Canadian Blood Services (CBS) and the Provincial Territorial Ministries have indicated that the S/D plasma should comprise at least 80% of the plasma inventory by September of 2023.

How this will impact you

Although S/D Plasma and Frozen Plasma (FP) have the same clinical indications, there are some differences in the products themselves and the packaging of the product that prescribers should be aware of.Further information from Canadian Blood Services on S/D Plasma and the national transition to this product can be found at https://profedu.blood.ca/en/transfusion/publications/faq-solvent-detergent-sd-treated-plasma-octaplasma. The main provincial impacts include:

- Patients will no longer require special approval to receive S/D plasma.
- S/D plasma can be scanned as a regular blood component using Connect Care's Blood Product Administration Module (BPAM). The S/D plasma build as a plasma protein product will be deactivated.
- S/D plasma takes 15-20 minutes longer to thaw than standard FP, so there will be a phased inventory rollout with the phased in details in the background section.

Background

S/D Plasma is manufactured from large pools of plasma that undergo pathogen inactivation using a solvent-detergent process. Due to the manufacturing process, S/D Plasma units have a standard volume of 200 mL and uniform levels of coagulation factors. The levels for all clotting factors are similar to those in frozen plasma (FP) with the exception of lower protein S and anti-plasmin levels.

The transition to S/D Plasma represents a significant change in our inventory management and the transfusion service will do its best to manage the multiple plasma types available in the most appropriate and efficient manner. To meet the 80% target but avoid wastage of current plasma stocks and minimize IT build in non Connect Care legacy systems, and in recognition of the longer thaw time, these are the planned implementation phases:

Phase 1 (starting April 1st):

- Group specific S/D plasma will be the preferred plasma type for patients undergoing apheresis procedures.
- Sites impacted in phase 2 will begin ordering replacement plasma inventory as S/D plasma.

Phase 2 (starting May 15th post Connect Care launch 6):

- The larger trauma reference centres (Foothills Medical Centre, University of Alberta Hospital and Royal Alexandra Hospital) and vascular centres (Peter Lougheed Centre and Grey Nuns Community Hospital) will maintain a stock of prethawed S/D plasma of different blood groups for urgent requests. The Alberta Children's Hospital will not prethaw plasma but will have a dual inventory of S/D plasma and standard AB plasma.
    - Planned plasma infusions for Pediatric patients will preferentially be filled with S/D plasma. However, due to the current inability to split the S/D plasma units, neonates receiving top up plasma transfusions will receive standard FP-Divided units.
- Regional hubs in Grande Prairie, Fort McMurray and Red Deer, as well as the smaller urban sites in Edmonton and Calgary, that are live on WellSky, will not stock thawed plasma but will stock all groups of S/D plasma and either AB or low titre group A standard FP. For urgent requests, group AB or low titre group A FP will be the preference until group specific SD can be thawed. For planned plasma infusions, group specific S/D plasma will be used.
- Rural sites that stock FP only for emergency purposes will predominantly stock standard AB FP or low titre group A FP. Low titre group A FP can only be used as a universal plasma when WellSky is live at these sites due to IT restrictions.

Phase 3 (starting November 15th post Connect Care launch 7)

- Regional hubs in Medicine Hat and Lethbridge will not stock thawed plasma but will stock all groups of S/D plasma and either AB or low titre group A standard plasma. For urgent requests, AB or low titre group A plasma will be the preference until group specific SD can be thawed. For planned plasma infusions, group specific SD plasma will be used.
- Neonatal exchange transfusions will preferentially receive reconstituted whole blood with S/D plasma.

Action Required

Prescribers are to order using current plasma orders. The transfusion service will provide the most appropriate type of plasma available for the indication based on site inventory.

Dosing Information

The National Advisory Committee (NAC) recommends dosing using the standard plasma dose of 10-15 mL/kg. Despite the smaller volume, the standardized coagulation profile of the S/D plasma has their units considered as equivalent to a current unit of FP for the purposes of Massive Hemorrhage Protocols. (www.nacblood.ca).

Effective

April 1st, 2023

Questions/Concerns

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Approved by

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