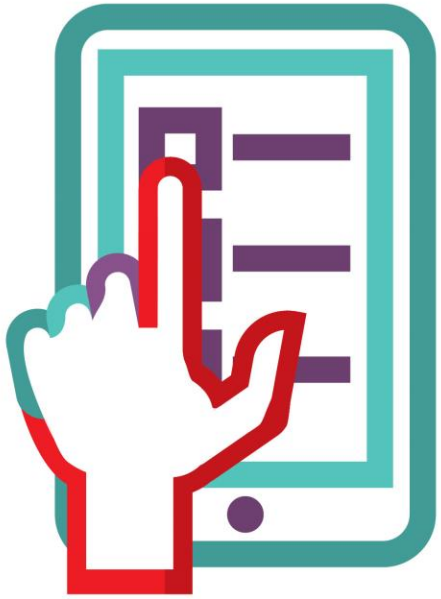
Pre-event survey



Help us learn a little more about you!

Fill out our pre-event survey by scanning the QR code or click this link. You can even submit questions to the presenter!

Survey takes about 2 minutes to complete.
All submissions are anonymous and used for quality improvement of the event.

Canadian Blood Services
BLOOD PLASMA STEM CELLS ORGANS & TISSUES





Natasha Rickards, RN
Transfusion Medicine Nurse Specialist
HLA/HPA Selected Platelet Program, Nursing Lead

Canadian Blood Services
BLOOD
PLASMA
STEM CELLS
ORGANS
& TISSUES

Disclosure

- Canadian Blood Services- Natasha Rickards RN.

  Nothing to declare





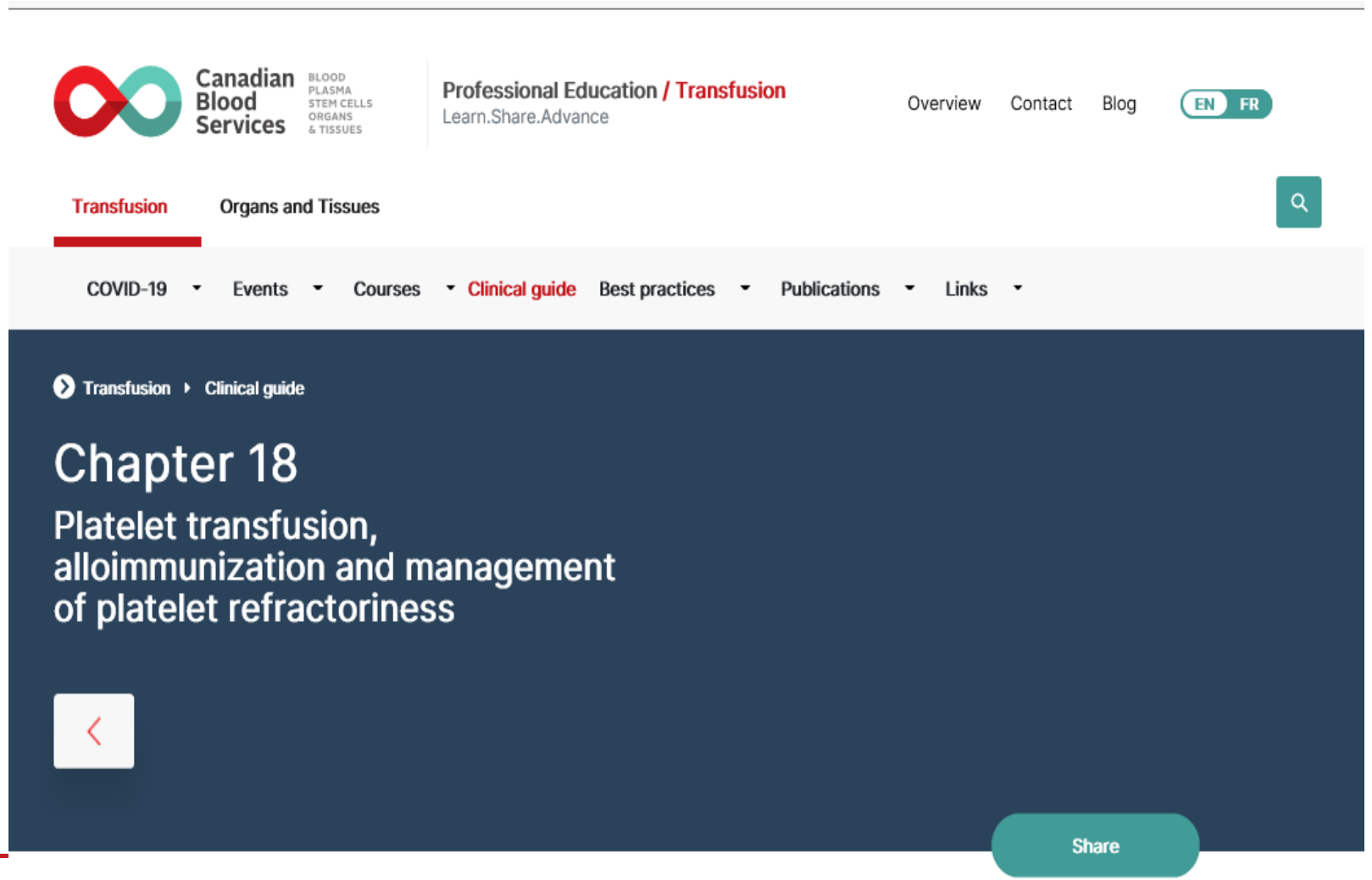
A Day In The Life of
The HLA/HPA Selected Platelet Program

Objectives:

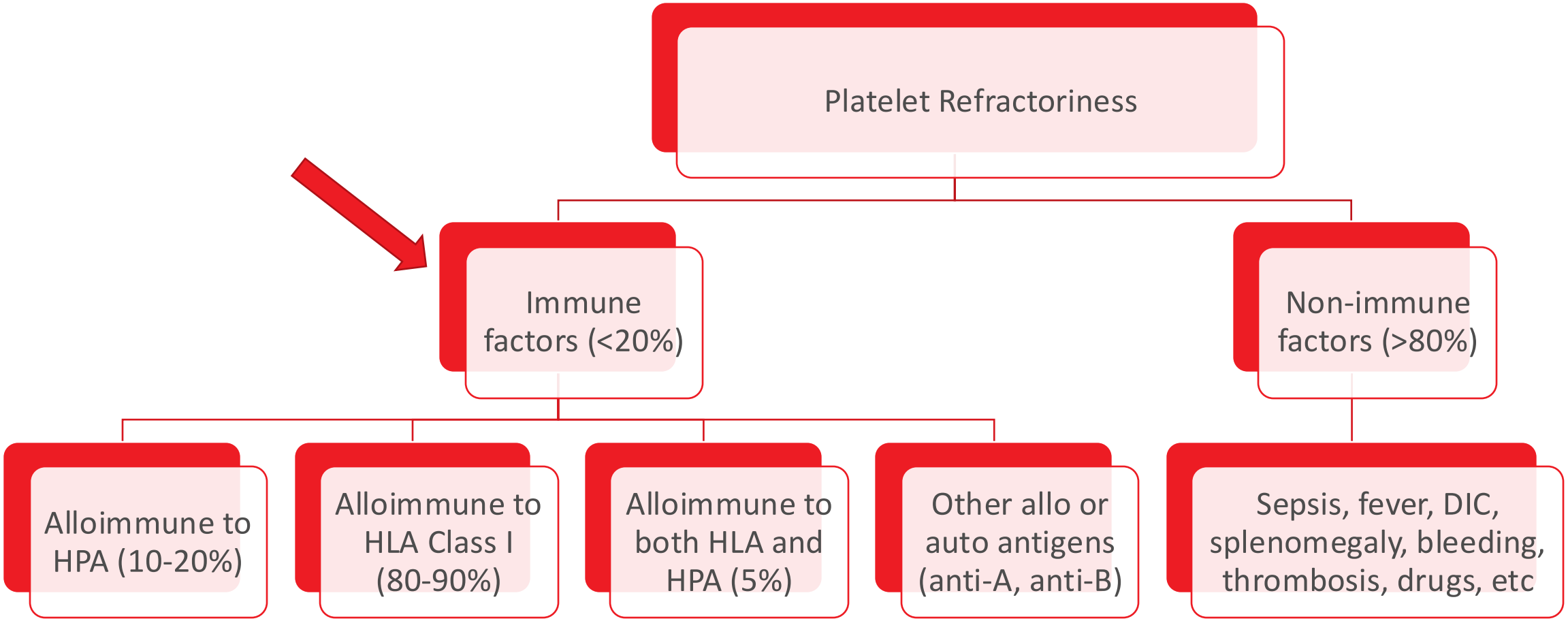
- Introduction to what alloimmunized refractoriness is in a patient
- Understanding of how to find and complete the request form for HLA/HPA Selected Platelet program
- Awareness of how Canadian Blood Services obtains the product for the patient
- Familiarity with the information the HLA/HPA Selected Platelet program requires and/or sends
- Learn why the post transfusion report is important

Great Resource Information

https://profedu.blood.ca



Platelet Refractoriness



Modified from Pavenski et al Tissue Antigens 2012

Is It Time to Test for Human Leukocyte Antigen(HLA)/ Human Platelet Antigen (HPA) Antibodies?

- **Is there a lack of adequate response to random platelets on at least 2 occasions ?**

Definition-The 1 hr post transfusion platelet count is < $10x10^9$/L higher than the pre transfusion platelet count.

- **Is there an absence of other non-immune factors known to cause refractoriness ?**

Definition- fever, infection, drugs, splenomegaly, disseminated intravascular coagulation etc.

Key Factor in the decision to consider HLA/HPA Selected Platelets

Is there the presence of HLA antibodies and/or HPA antibodies

How common are the antibodies that are found ?

The antibodies that have the most impact on platelet transfusions are

- **HLA Class I, A and B**
- **HPA antibodies**

All Apheresis donors have HLA typing and HPA typing tests completed

Calculating the Impact

Canadian calculator Panel Reactive Antibodies (cPRA) is a tool used by the organ transplant community to determine the impact of antibodies on finding a match.

The HLA/HPA Selected Platelet Program uses the Class I A and B antibodies to calculate the cPRA from a patients test results

Example –cPRA 20% means 80% of single donor platelets in inventory should match.

The Canadian cPRA calculator can be found on blood.ca

For patients to qualify for HLA/HPA Selected Platelets the patient should have a cPRA of >20% for HLA Class 1 A and B antibodies and or an HPA antibodies.

Book now to donate blood and plasma

Location or web code

Start booking

Discover how you can **make all the difference**.



Blood for Life

Kim

Blood recipient

Learn more



Plasma for Life

Jayden

Plasma recipient

Learn more



Stem Cells for Life

Tom

Stem cell recipient

Learn more



Organs & Tissues for Life

Paulo

Organ recipient

Learn more

COVID-19 PANDEMIC UPDATES

Hospital services

Canadian Blood Services is responsible for a secure system of life essentials for transfusion and transplantation that's reliable, accessible and sustainable.

Our hospital liaison specialists work closely with hospital technical staff, physicians, administrators and provincial blood offices to establish standardized ways of collecting information about demand for our products and services. Our physicians provide support to hospitals, physicians and care providers, public health agencies, donors and others, 24 hours daily, 7 days a week.

- COVID-19 Information for Health Care Professionals
- Customer service
- Laboratory services
- Products
- Inventory ordering
- Licensing and inspections
- Transfusion practice
- Rare Blood Program
- HLA/HPA Selected Platelets
- Stem Cell Registry Documents
- Cord Blood Bank



Services aux hôpitaux

La Société canadienne du sang a la responsabilité de fournir des produits vitaux pour la transfusion et la greffe en maintenant un système d'approvisionnement sûr, fiable, accessible et durable.

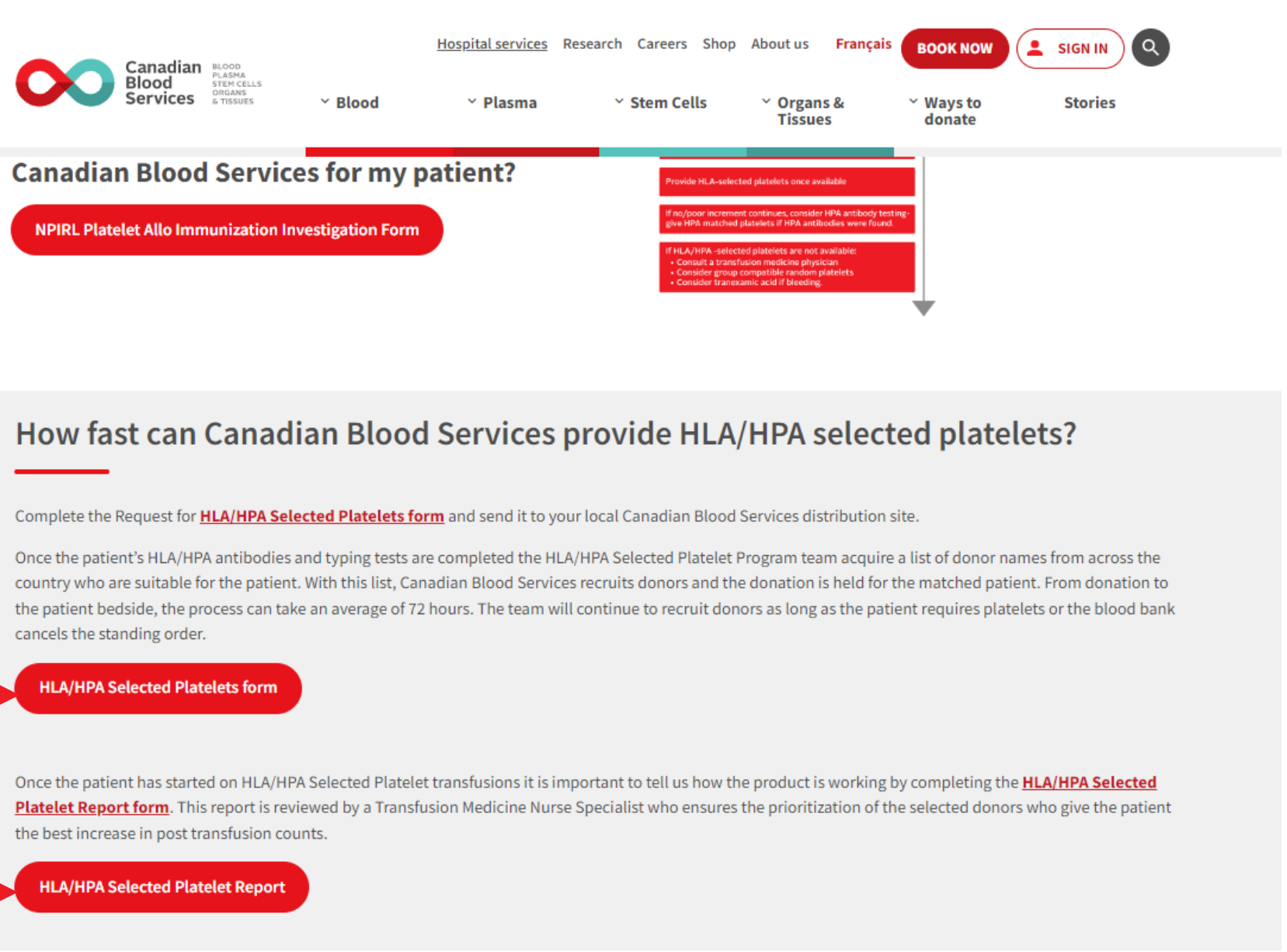
Nos agents de liaison travaillent en étroite collaboration avec les technologues, les médecins et l'administration des hôpitaux, ainsi que les bureaux provinciaux de gestion du sang, à l'établissement de normes régissant la collecte des données relatives aux produits et services que nous fournissons. Notre équipe médicale offre du soutien aux hôpitaux, aux médecins et autres professionnels de la santé, aux agences de santé publique, aux donneurs et autres personnes intéressées 24 h/24, 7 j/7.

- COVID-19 : information pour les professionnels de la santé
- Service à la clientèle hospitalière
- Hospital Services Forms
- Services d'analyses
- Produits
- Commandes de produits
- Licences et inspections
- Pratique transfusionnelle
- Programme de sang rare
- Documentation du Registre de donneurs de cellules souches
- Plaquettes HLA/HPA spécifiques



Canadian Blood Services
BLOOD PLASMA STEM CELLS ORGANS & TISSUES

Where To Find the Request Form and The Reporting Form



Communication from the Case Managers

- If there are discrepancies between the request form and the test results
- Call to tell you when the first units will arrive
- Send a delivery schedule every Friday
- Call when a unit isn’t going to arrive as promised
- Call to ask for updated antibody test results if they are > 3 months old

National Platelet Immunology Reference Laboratory

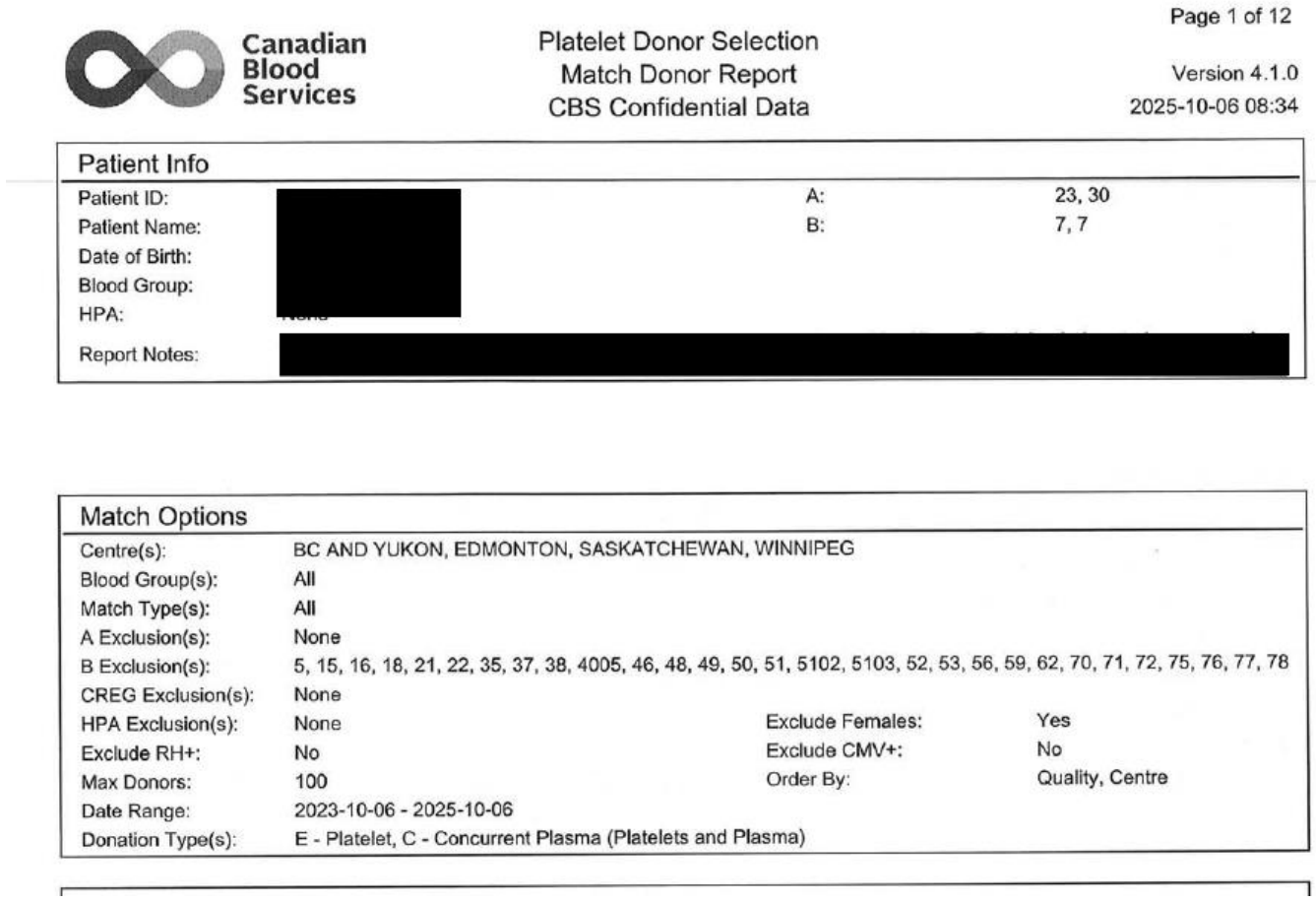
- Perform patient HLA and HPA platelet typing and platelet antibody identification
- Perform donor HLA and HPA typing
- Maintain the HLA/HPA software system that generates the patient and donor matched report.

Arch Pathol Lab Med. 2022;146:1243–1251



Patient Donor Selection Match Donor Report List (PDS)

- An IT-based system that can filter for HLA and HPA antigen profile of our tested donors.
- Provides list of donors with HLA and or HPA antigens suitable for the patient's HLA/HPA typing and antibody profile
- The list is ranked from perfect match to permissive mismatched donors.



Canadian Blood Services

Platelet Donor Selection
Match Donor Report
CBS Confidential Data

Page 1 of 12

Version 4.1.0
2025-10-06 08:34

Patient Info

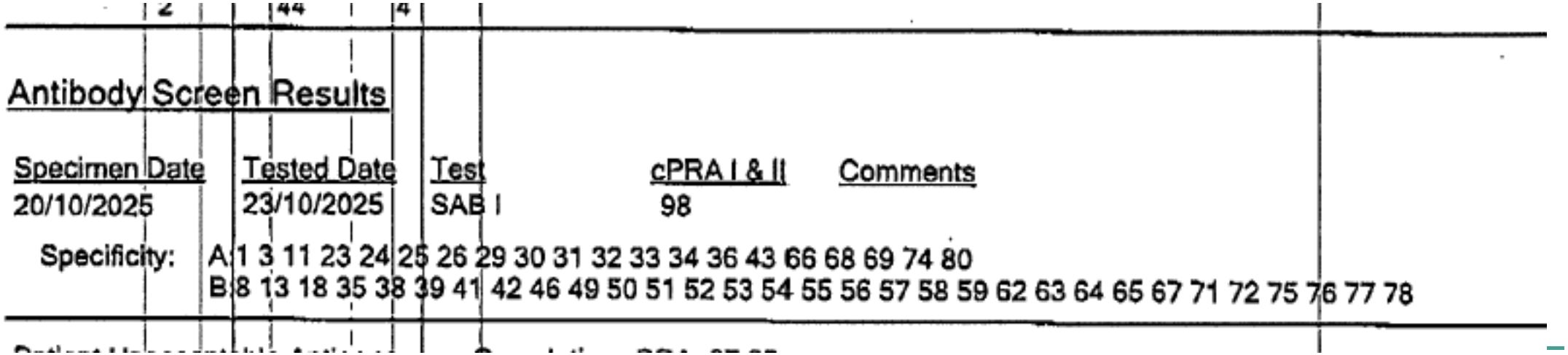
Patient ID:	[redacted]	A:	23, 30
Patient Name:		B:	7, 7
Date of Birth:			
Blood Group:			
HPA:			
Report Notes:	[redacted]		

Match Options

Centre(s):	BC AND YUKON, EDMONTON, SASKATCHEWAN, WINNIPEG		
Blood Group(s):	All		
Match Type(s):	All		
A Exclusion(s):	None		
B Exclusion(s):	5, 15, 16, 18, 21, 22, 35, 37, 38, 4005, 46, 48, 49, 50, 51, 5102, 5103, 52, 53, 56, 59, 62, 70, 71, 72, 75, 76, 77, 78		
CREG Exclusion(s):	None		
HPA Exclusion(s):	None	Exclude Females:	Yes
Exclude RH+:	No	Exclude CMV+:	No
Max Donors:	100	Order By:	Quality, Centre
Date Range:	2023-10-06 - 2025-10-06		
Donation Type(s):	E - Platelet, C - Concurrent Plasma (Platelets and Plasma)		

Case A

- AML patient, 74 years old with a current platelet count of 3
- Limited response to random platelets
- HLA antibody screening showed cPRA of 98%-heavily alloimmunized
- Request for 3 units per week starting ASAP



Antibody Screen Results

Specimen Date	Tested Date	Test	cPRA I & II	Comments
20/10/2025	23/10/2025	SAB I	98	

Specificity:
A 1 3 11 23 24 25 26 29 30 31 32 33 34 36 43 66 68 69 74 80
B 8 13 18 35 38 39 41 42 46 49 50 51 52 53 54 55 56 57 58 59 62 63 64 65 67 71 72 75 76 77 78

Case A

- The team receive the donor lists:
- Platelet Donor Selection Match Report shows

-20 perfect match donors in the country

- 39 permissive mismatched donors in the country

Find Me A Unit!



First We Check in **INVENTORY**

Its All About The Timing

From the day the request is received: 3-4 business days to first product delivery
Monday to Friday, 0730hr to 1800hr ET

Approximately 48 to 72hr from donation to delivery to the hospital





Case A

- We found a unit in Calgary inventory that was donated on 2025-10-23 and was shipped to SASK on 2025-10-25




MATCHMAKER, MATCHMAKER
MAKE ME A MATCH, FIND
ME A FIND, CATCH ME A CATCH
imgflip.com

Recruit The Donors
15 Platelet Apheresis Clinics From BC to NFLD



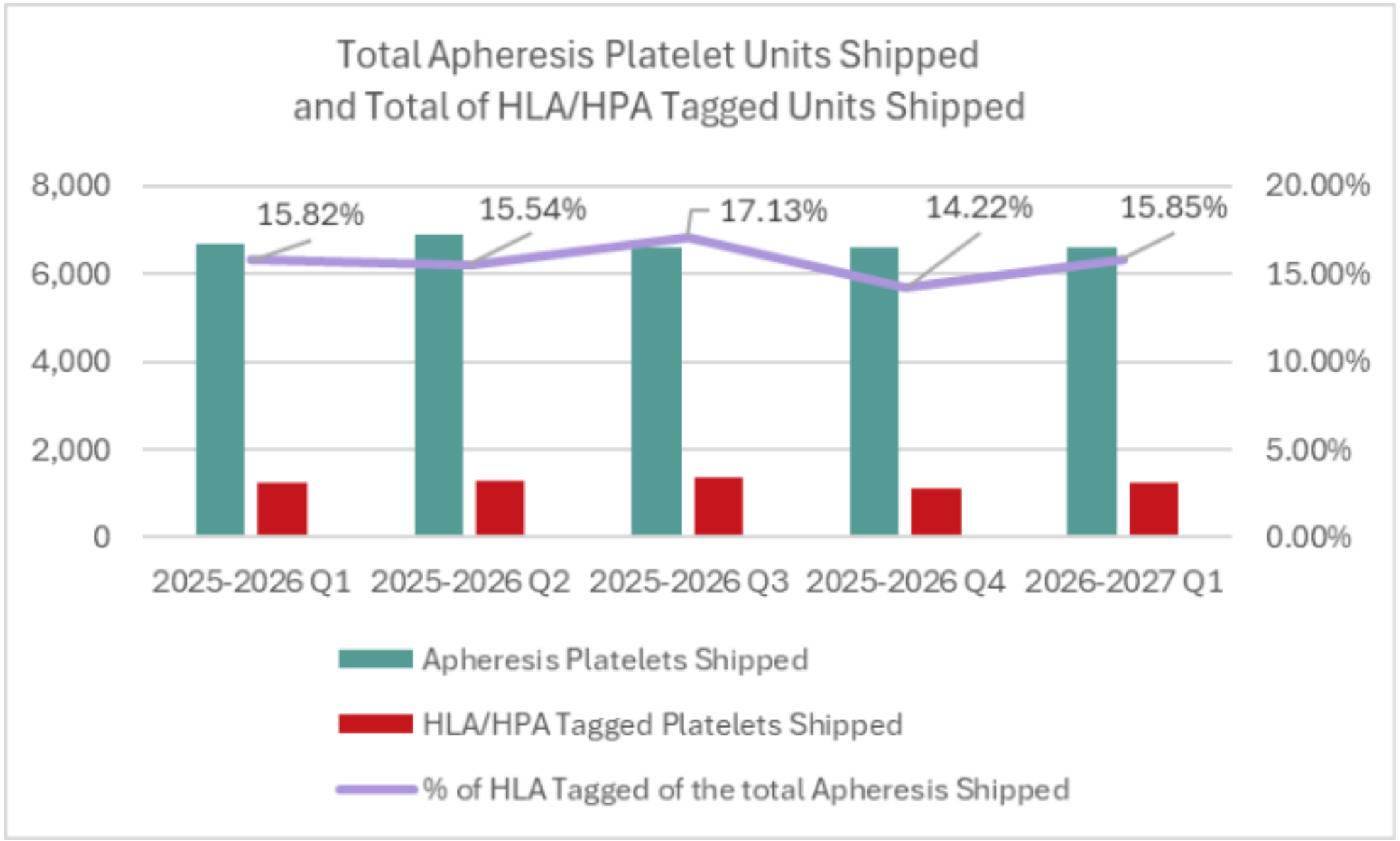
Case A

- The pre post and product utilization data indicated that the patient responded fairly well to 5 of the 7 units sent.
- We received 2 updates to the request over the following weeks asking to reduce the number of units per week.
- We received a discontinue request 5 weeks later.

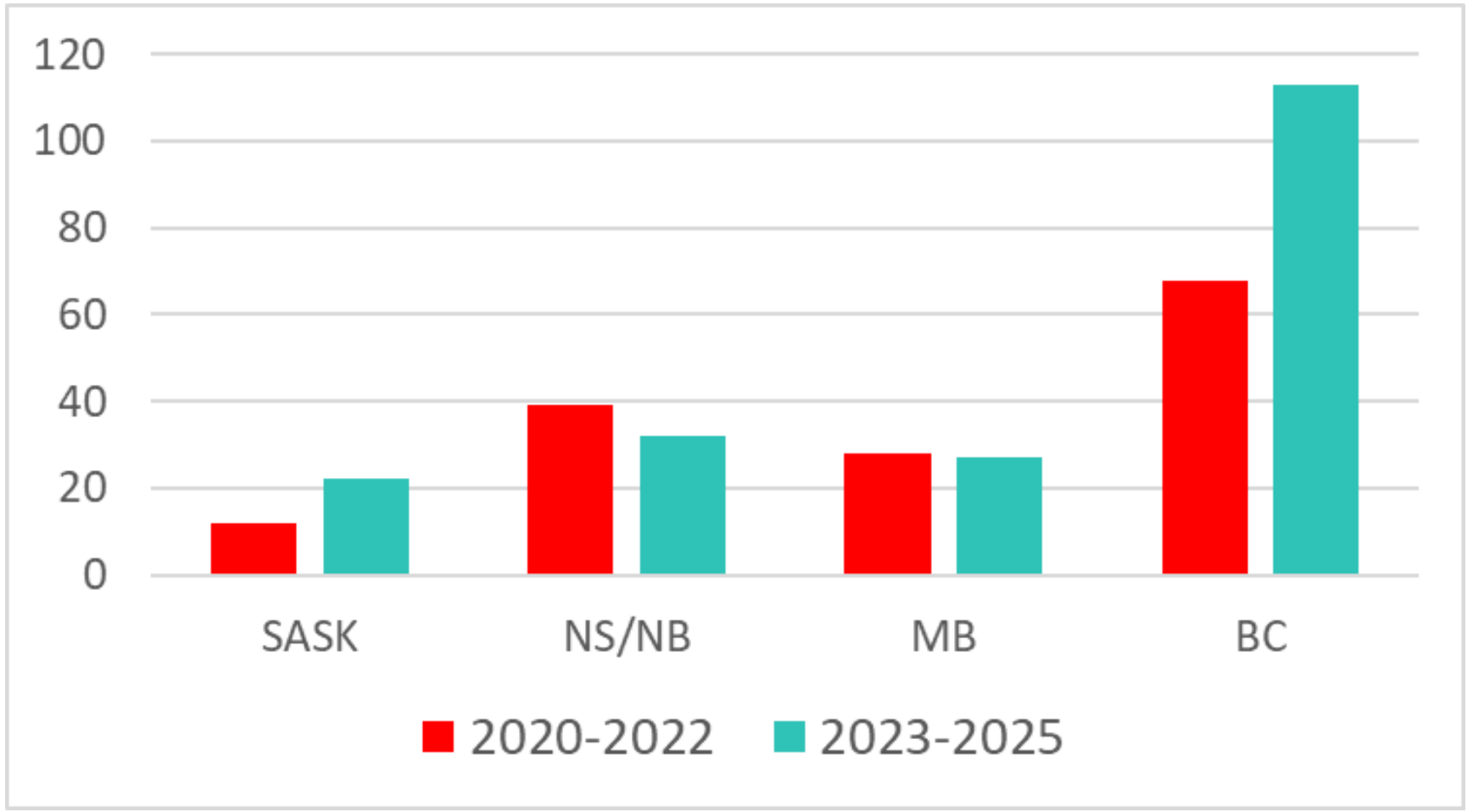
Importance HLA/HPA Selected Platelet Report

HLA/HPA product transfusion pre and post platelet counts and utilization information is invaluable.

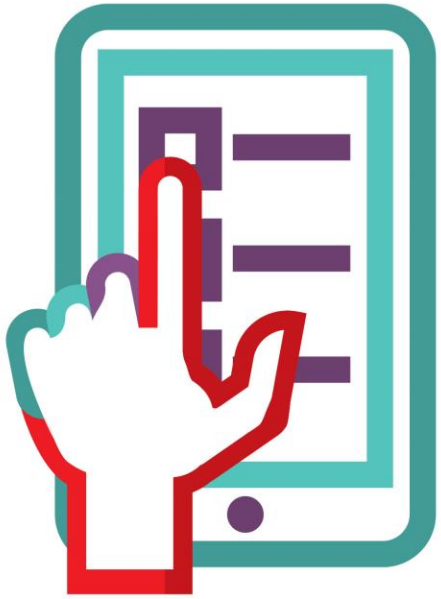
- We look at them and make sure we have the best donor to patient matches
- We record the data
- We hope to learn more about HLA/HPA and the patient's response with the data we collect
- We need to prove to our funders that HLA/HPA platelets are worth the resources


Total Apheresis Platelet Units Shipped
and Total of HLA/HPA Tagged Units Shipped
8,000
6,000
4,000
2,000
0
20.00%
15.00%
10.00%
5.00%
0.00%
15.82%
15.54%
17.13%
14.22%
15.85%
2025-2026 Q1
2025-2026 Q2
2025-2026 Q3
2025-2026 Q4
2026-2027 Q1
Apheresis Platelets Shipped
HLA/HPA Tagged Platelets Shipped
% of HLA Tagged of the total Apheresis Shipped

HLA/HPA Selected Cases with Provincial Comparators



Post-event survey



Tell us how we did

Fill out our post-event survey by scanning the QR code or click this link. Share your thoughts on the event and help us create educational resources to support you.

Survey takes about 5 minutes to complete.
All submissions are anonymous and used for quality improvement of the event.

Together, we are Canada’s lifeline



