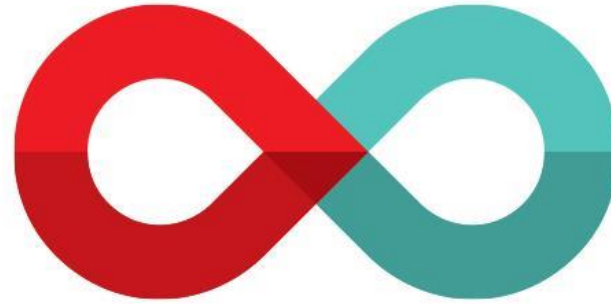




**Bilal,**  
*blood donor*



**Cara,**  
*blood recipient and cord  
blood stem cell donor*



## Plasma derived products demand

### A Canadian perspective

Sylvain Grenier, B Pharm, PharmD, FFIP, FOPQ  
Director, PPRP Formulary Program



**Canadian  
Blood  
Services**

BLOOD  
PLASMA  
STEM CELLS  
ORGANS  
& TISSUES

Public

# Outline

## Canadian Blood Services Overview

---

## Impact of the pandemic

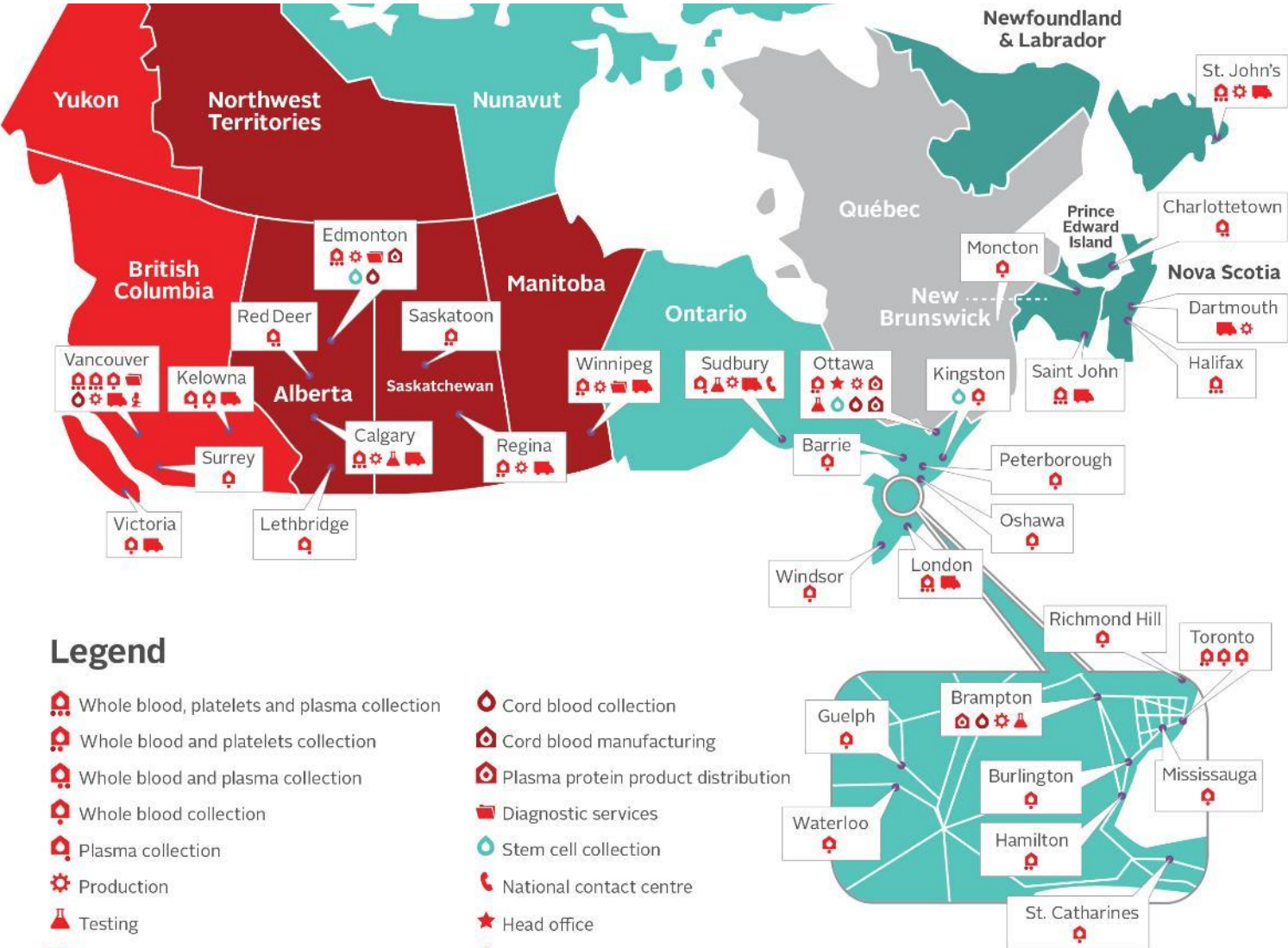
---

### Plasma Derived Products

- Immunoglobulins
  - C1-esterase inhibitors
  - Fibrinogen concentrate
  - Bypassing agents
- 

### Plasma Sufficiency

# Our locations



## Legend

- Whole blood, platelets and plasma collection
- Whole blood and platelets collection
- Whole blood and plasma collection
- Whole blood collection
- Plasma collection
- Production
- Testing
- Distribution centre
- Cord blood collection
- Cord blood manufacturing
- Plasma protein product distribution
- Diagnostic services
- Stem cell collection
- National contact centre
- Head office
- Centre for innovation

# Introductory Overview: Plasma Protein and Related Products (PPRP) formulary

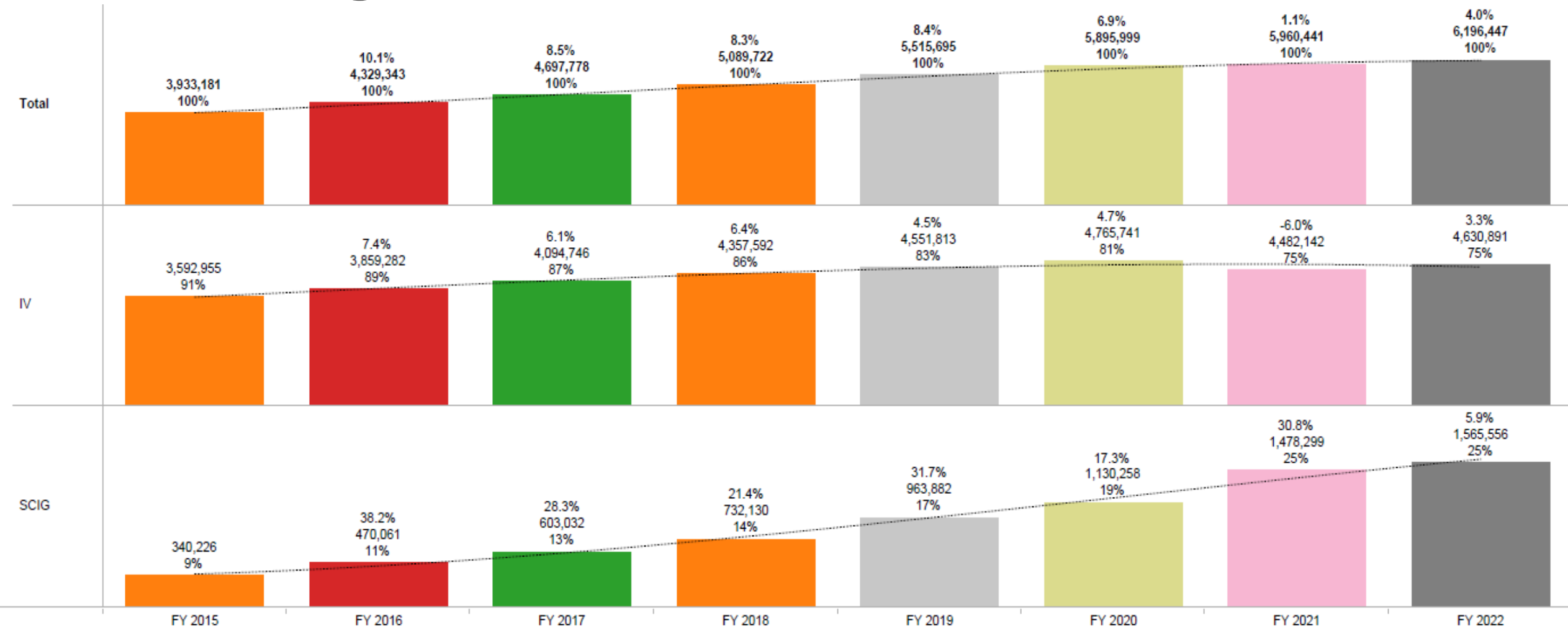
- Plasma Protein and Related Products (synthetic alternatives)
- Bulk purchase about 50 brands worth ~ \$800M annually
- Mainly public tendering process
- Equity of access for patients across the country



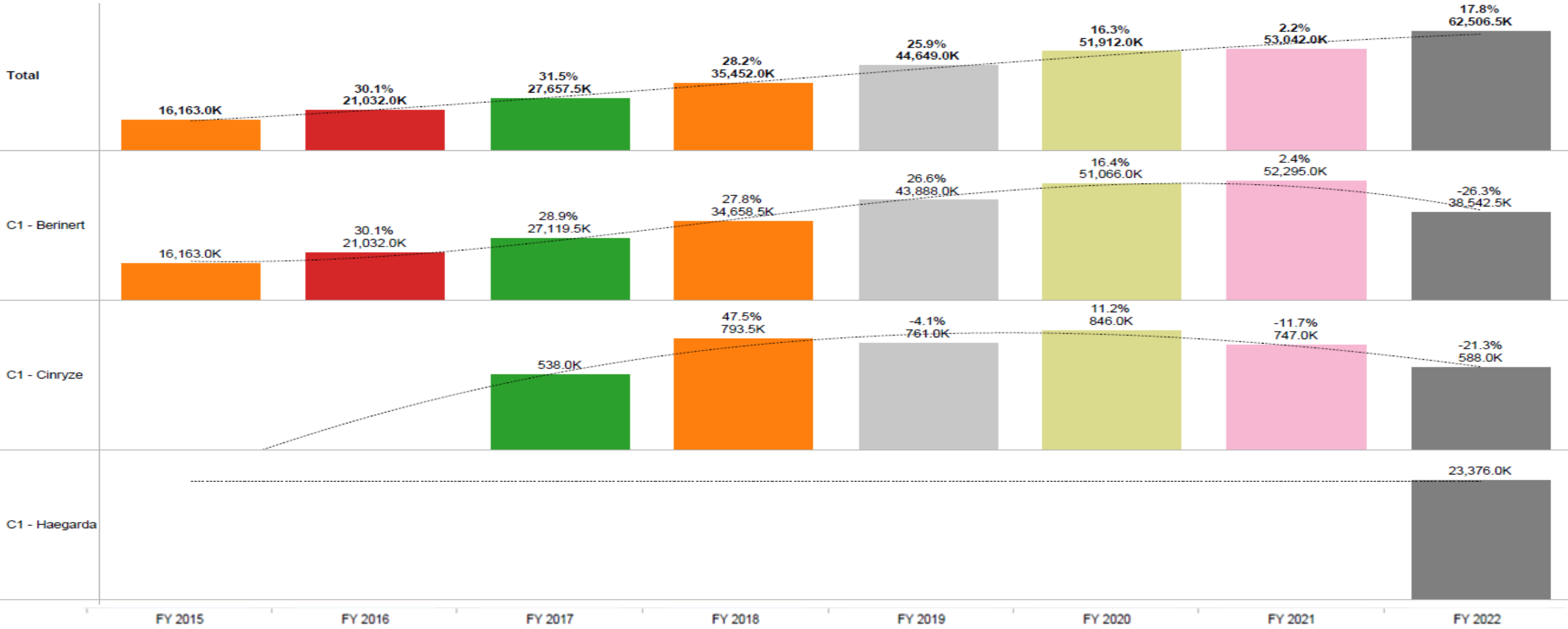
# Impact of the pandemic

- Overall decrease in demand
- Hospital use decreased due to deprioritizing of surgeries and other treatments
- Home use saw a significant increase in demand early in the pandemic (March 2020) followed by a significant decrease
- Demand has not recovered yet

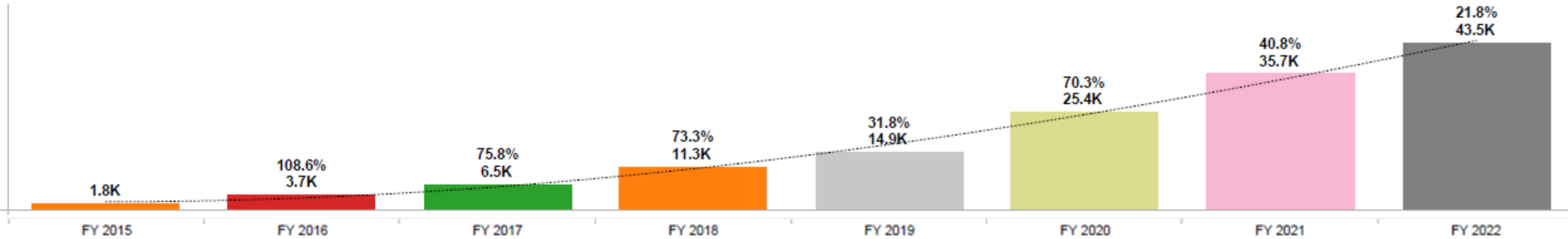
# Immunoglobulins



# C1 Esterase-inhibitors

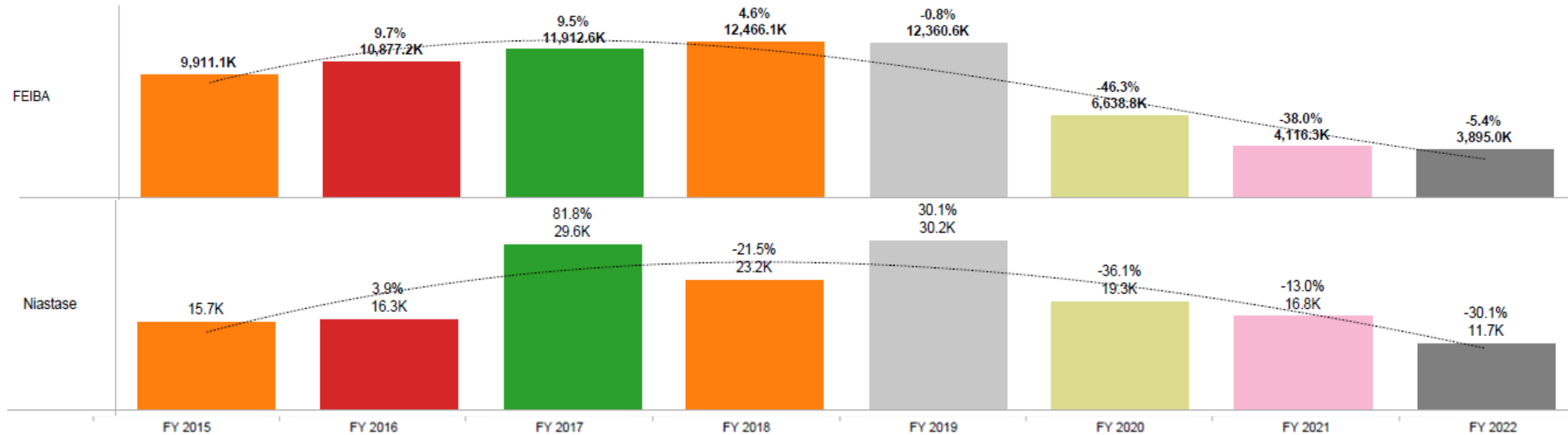


# Fibrinogen concentrate



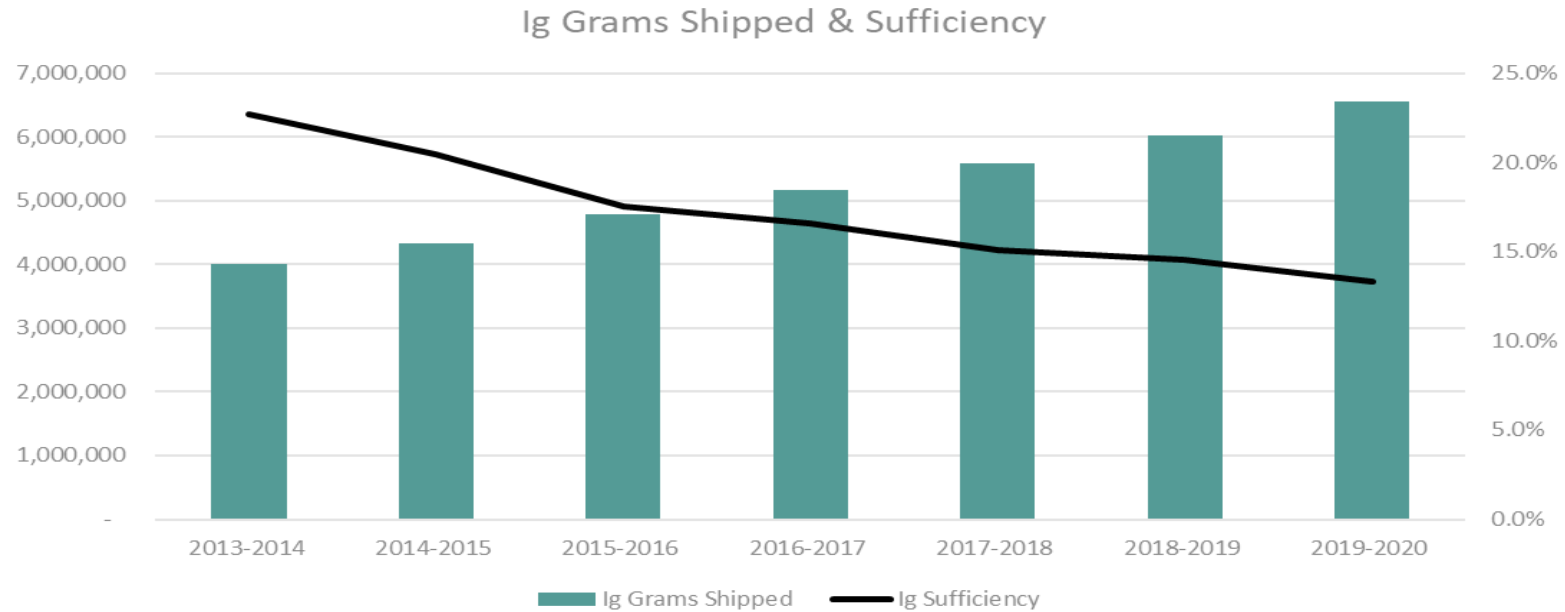


# Bypassing agents



# Canada is one of the highest users of immunoglobulin *per capita*

- In the last 10 years, Canada's rate of usage for immunoglobulin (Ig) has increased **111 per cent**
- Ig consumption rate approx. **219 g per 1,000 population**
- Canadian plasma sufficiency rate for Ig is now at **15 per cent**



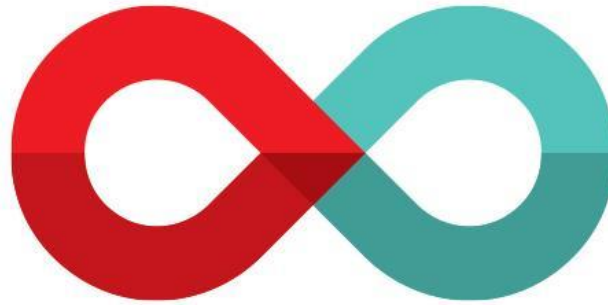
# Canada's goal is to grow from 15 to 50 per cent sufficiency for immunoglobulin as quickly as possible



Build eleven dedicated source plasma collection sites by March 2024

Increase source plasma in mixed collection network

Balance our portfolio by purchasing commercial product



**Albert,**  
*plasma donor*



**Linda,**  
*plasma recipient*

**Questions?**



# Canadian Blood Services

BLOOD  
PLASMA  
STEM CELLS  
ORGANS  
& TISSUES