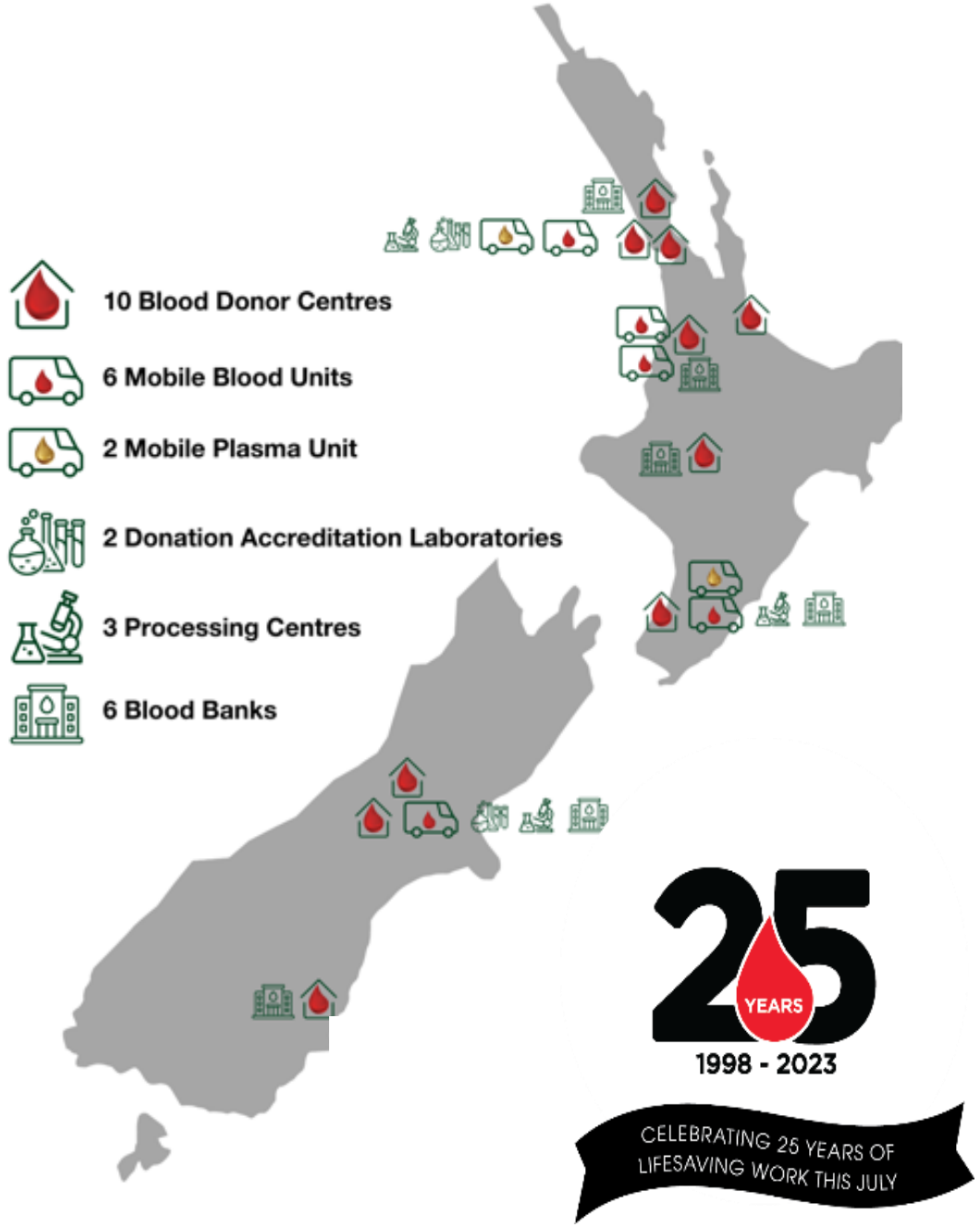
Finding balance: plasma collection and PDMP demand in New Zealand

Sarah Morley



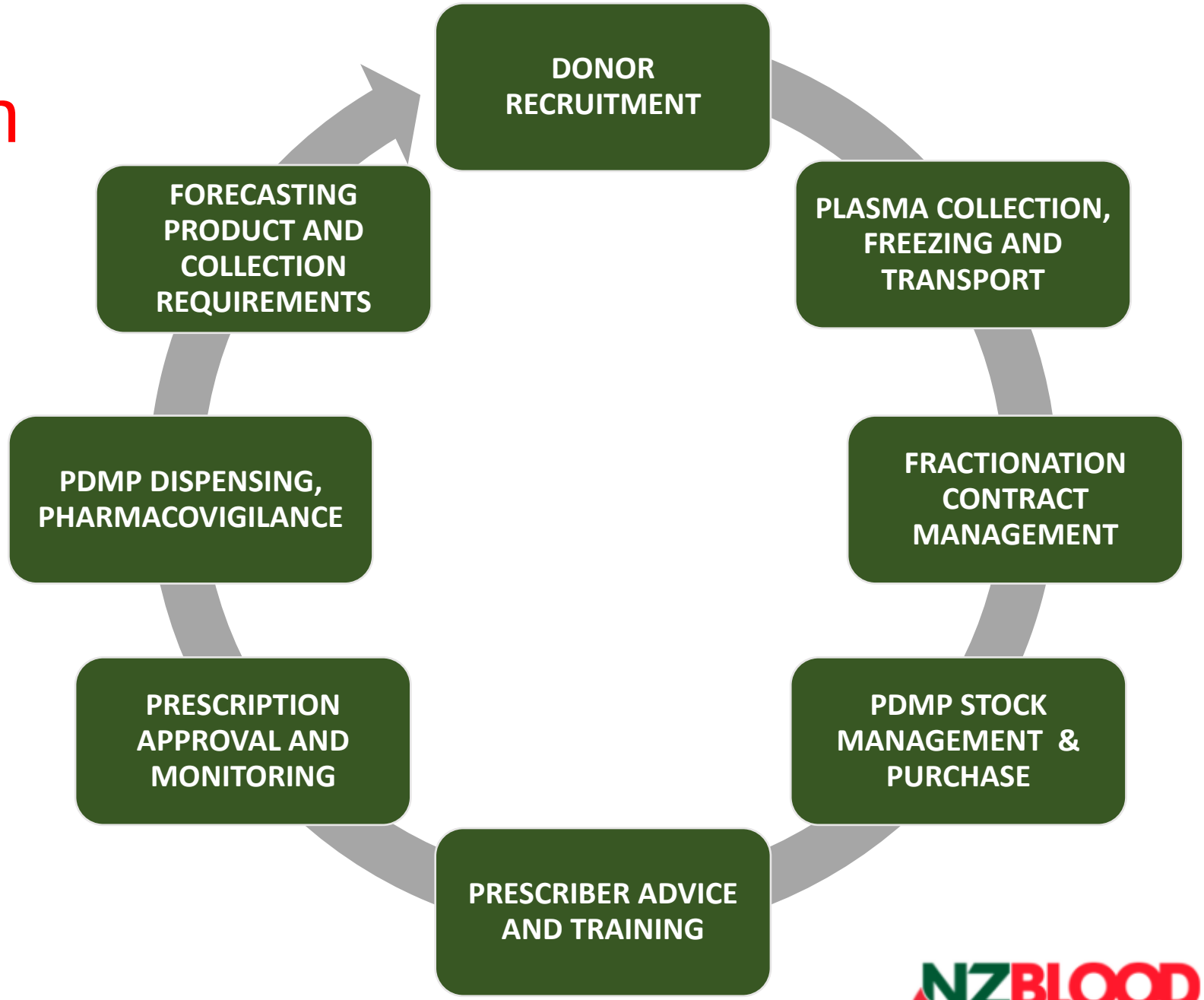
About NZBlood

- National Blood Provider for New Zealand since 1998 (celebrating 25 years)
- **Voluntary non-remunerated donation** (by statute)
- Whole blood and source plasma
- **10** Donor Centres and **> 300** mobile blood drive locations
- **3** Manufacturing and Processing Laboratories
- **‘Vein to vein’** service - **6** largest blood banks, specialist support to hospitals nationally and a single national blood banking IT system
- Comprehensive national haemovigilance and pharmacovigilance (for PDMPs)



NZBlood and the supply of PDMPs in New Zealand





NZBLOOD
Te Ratonga Toto O Aotearoa

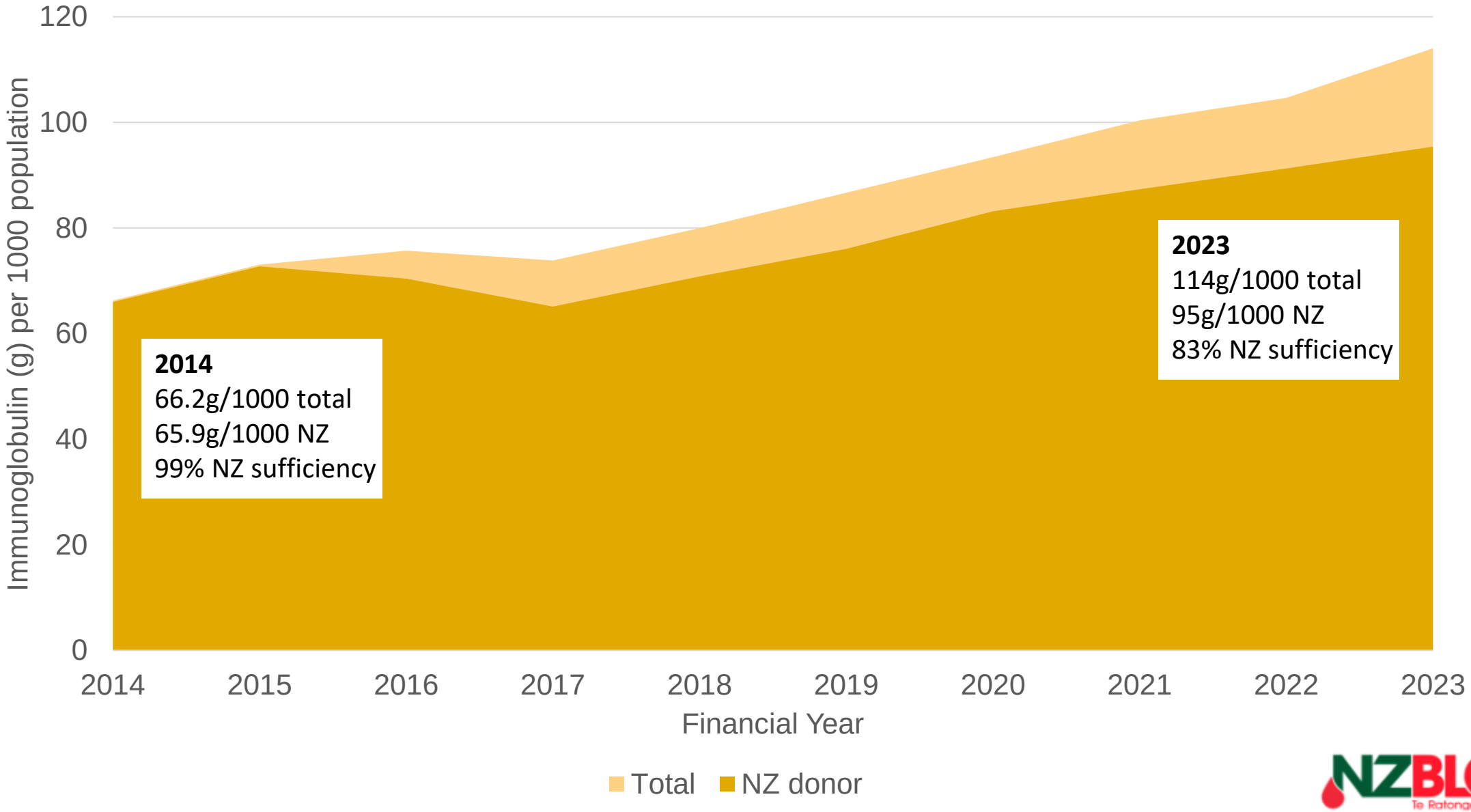
NZ PDMPs from Toll Fractionation

- **Immunoglobulin – IVIg and SCIg**
- **Albumin – 4% and 20%**
- **Prothrombin Complex Concentrate (PCC)**
- Biostate – FVIII with vWF
- Antithrombin III Concentrate
- Tetanus & Zoster immune globulin
- Normal Immunoglobulin (IM)
- RhD Immune Globulin (from commercial plasma)



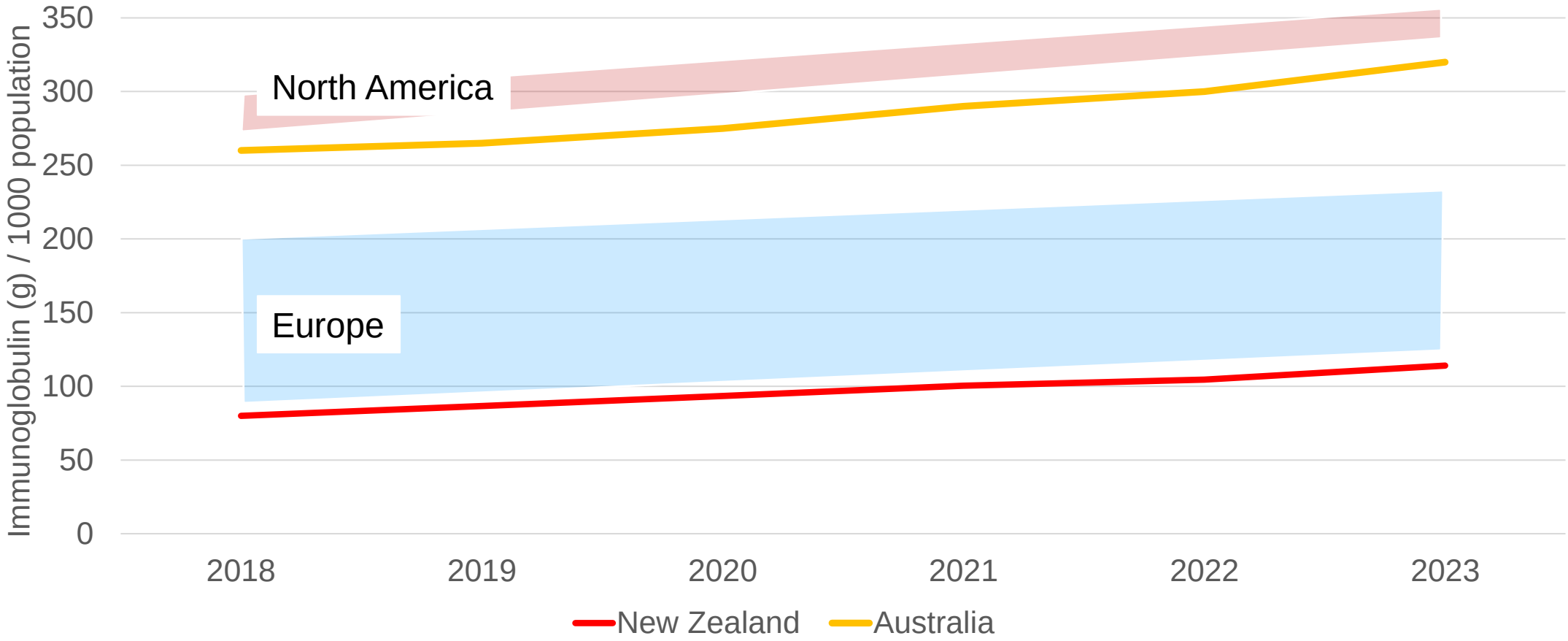
NZBLOOD
Te Ratonga Toto O Aotearoa

Immunoglobulin dispensed by source



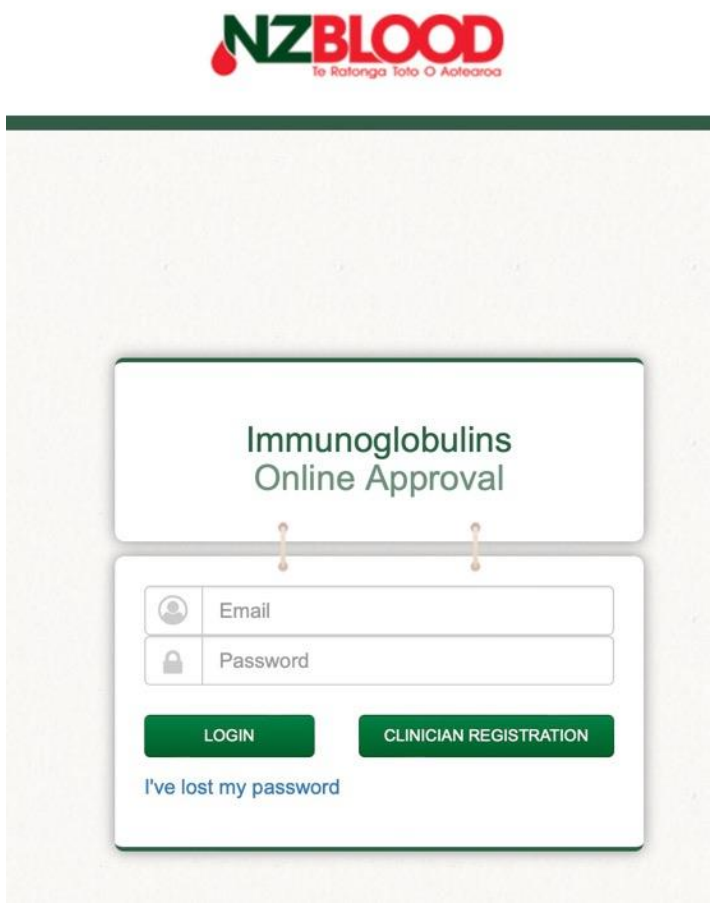
Demand

Immunoglobulin demand NZ / Australia

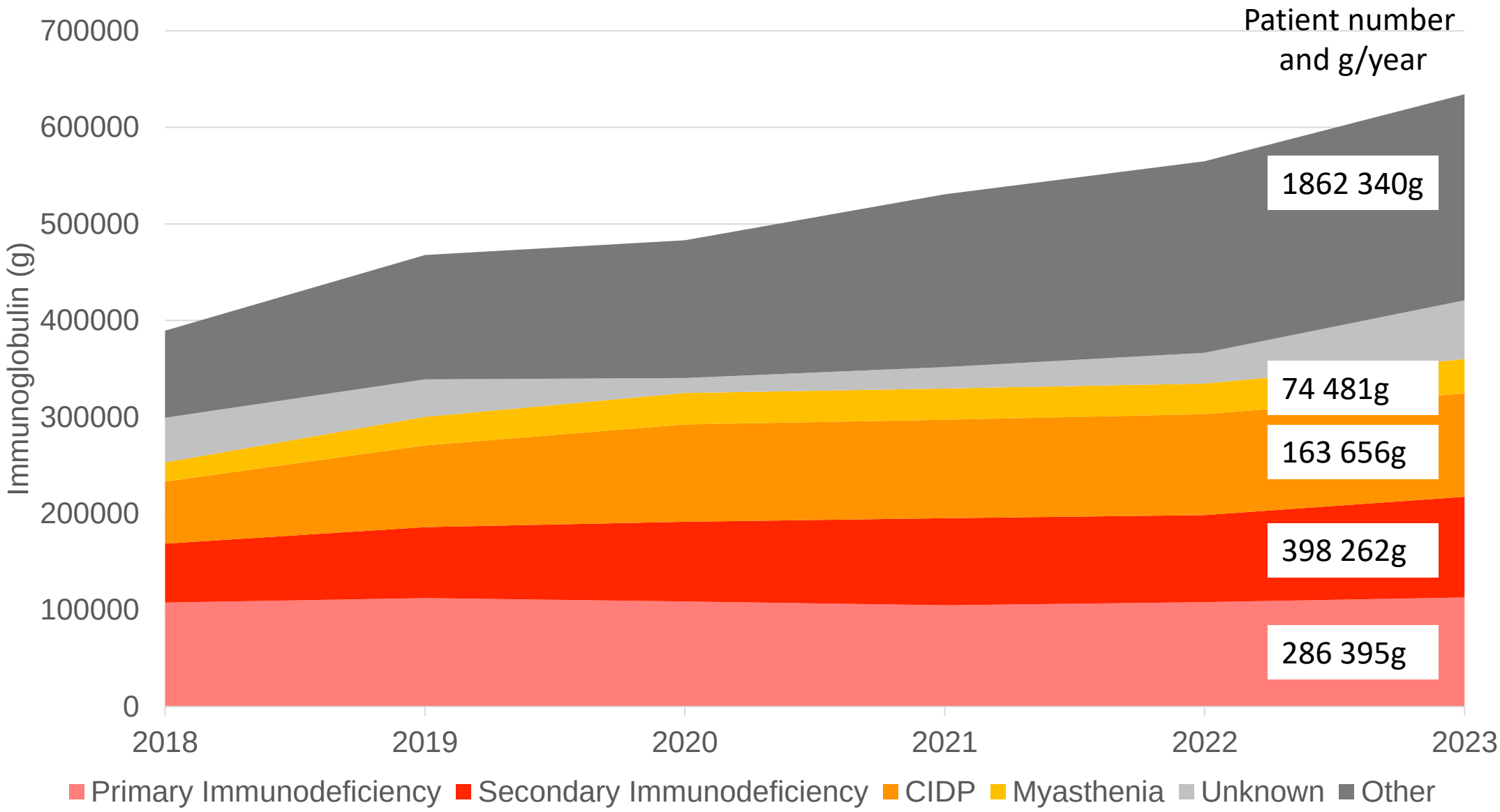


Approval to treat with Immunoglobulins

- **Immunoglobulin Online** (**IgO**) approval tool
- In use since 2019 – initially only in 6 NZBlood blood banks
- Approval for **all long-term Ig treatment** (based on Australian / UK guidelines)
- Captures **diagnosis and demographics** to support appropriate dose and formulation
- Reviewed by **NZBlood Transfusion Medicine Specialists**
- May require **discussion and peer-review** of cases
- Requires **annual renewal**, with clinical update, for each patient
- **Every hospital from mid-2024**

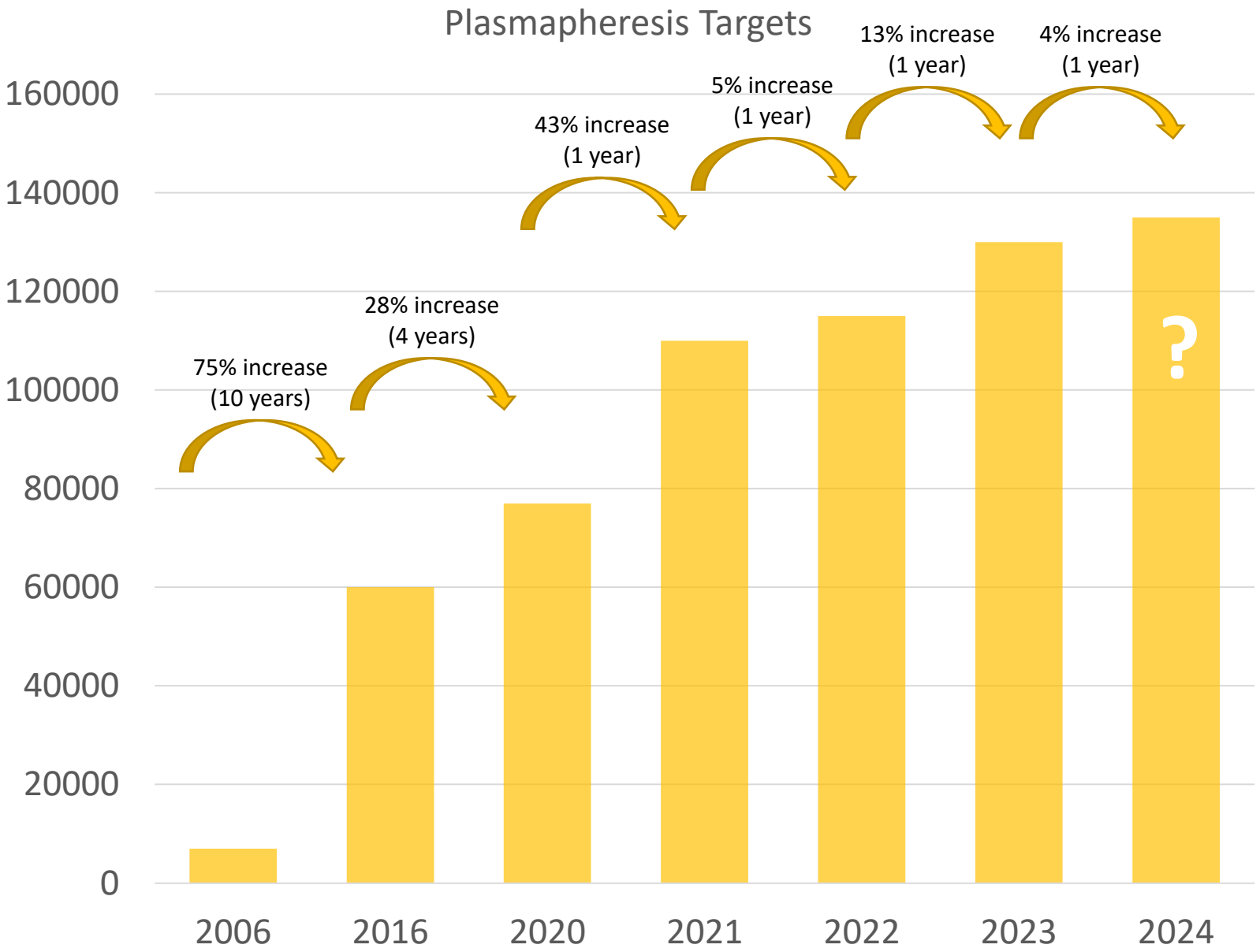


Immunoglobulin dispensed by diagnosis



Supply

Plasma apheresis collection targets

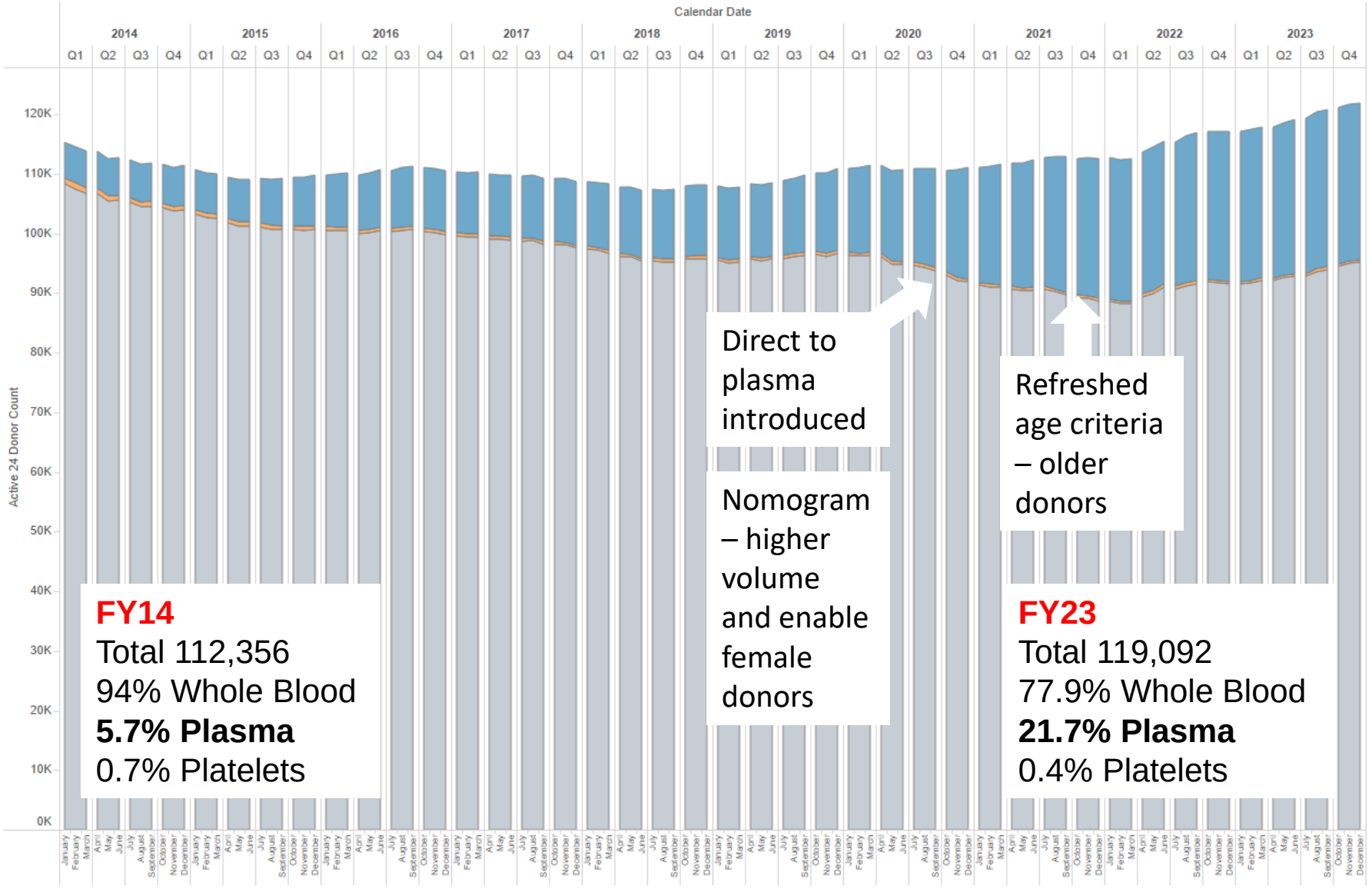


2006 – 7,000 plasma units
2016 – 60,000 plasma units
2020 – 77,000 plasma units
2021 – 110,000 plasma units
2022 – 115,000 plasma units
2023 – 130,000 plasma units
2024 – 135,000 plasma units

Requirements projected to grow 40% in next 4-5 years.

NZBLOOD
Te Ratonga Toto O Aotearoa

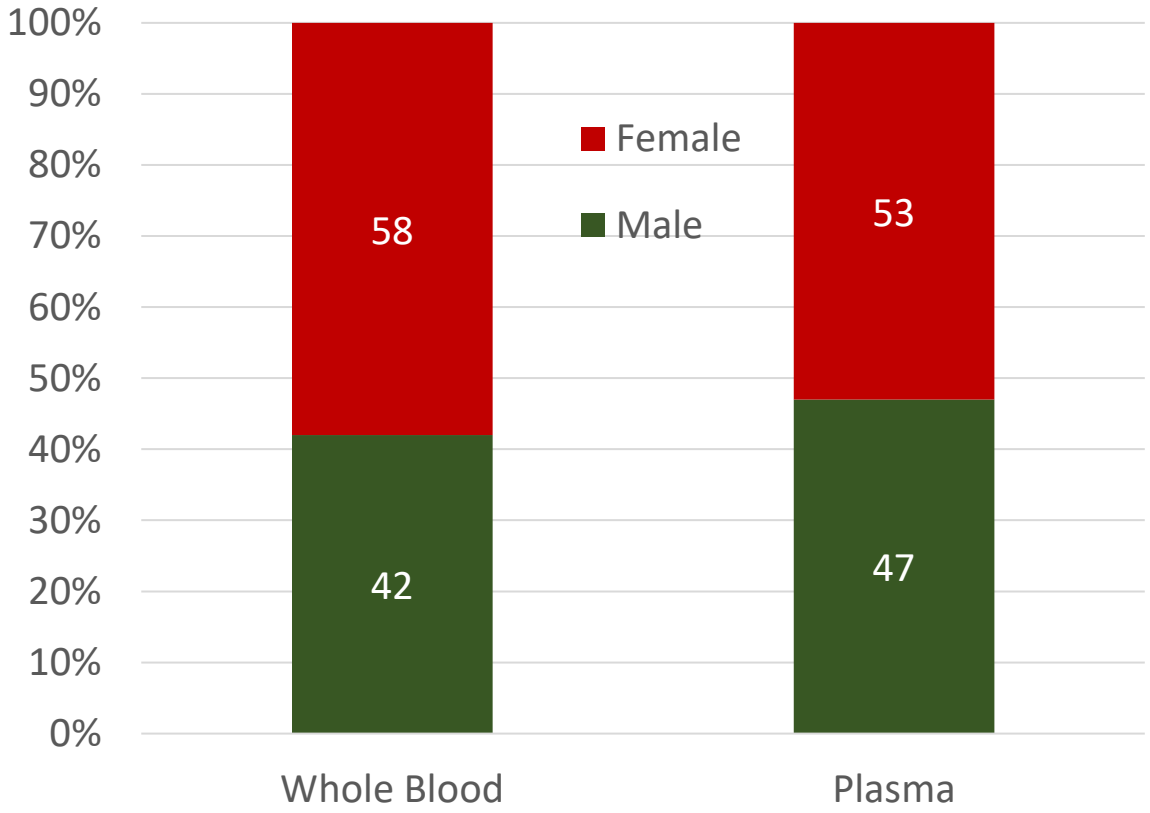
National active 24 donor panel



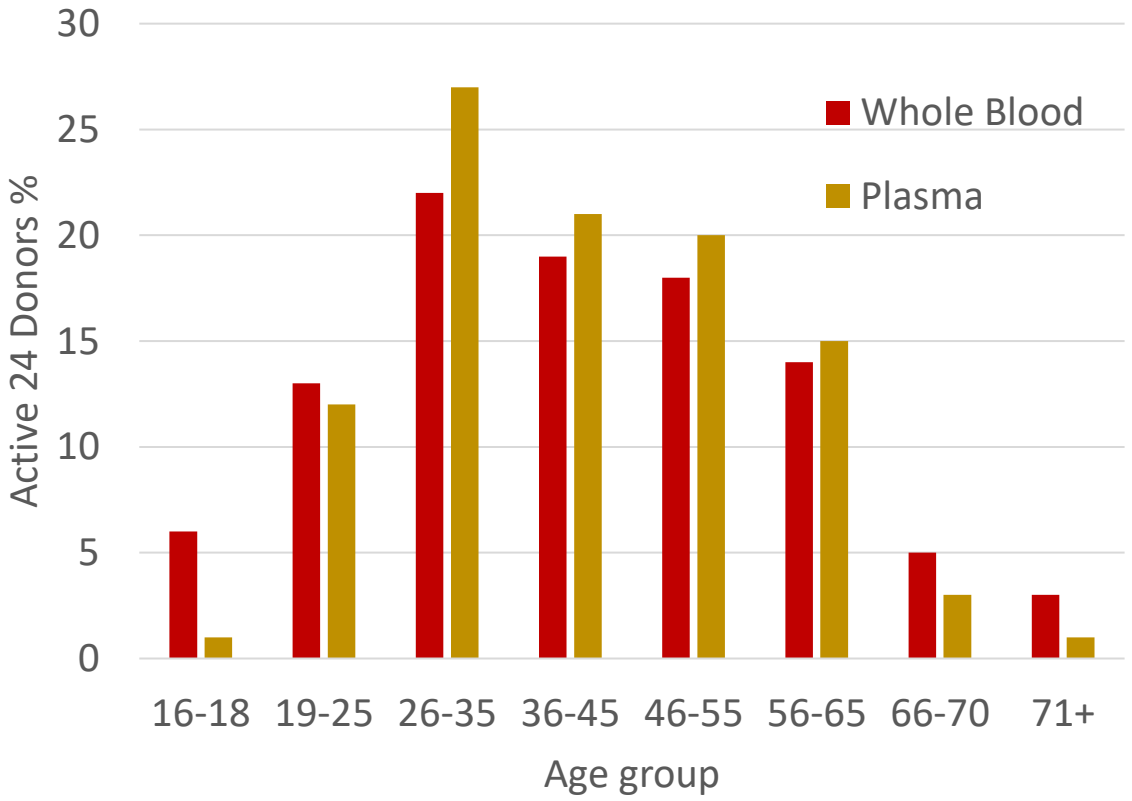
Donor demographics – Active 24 panels

Active 24 panel = approximately 2.3% of the total population

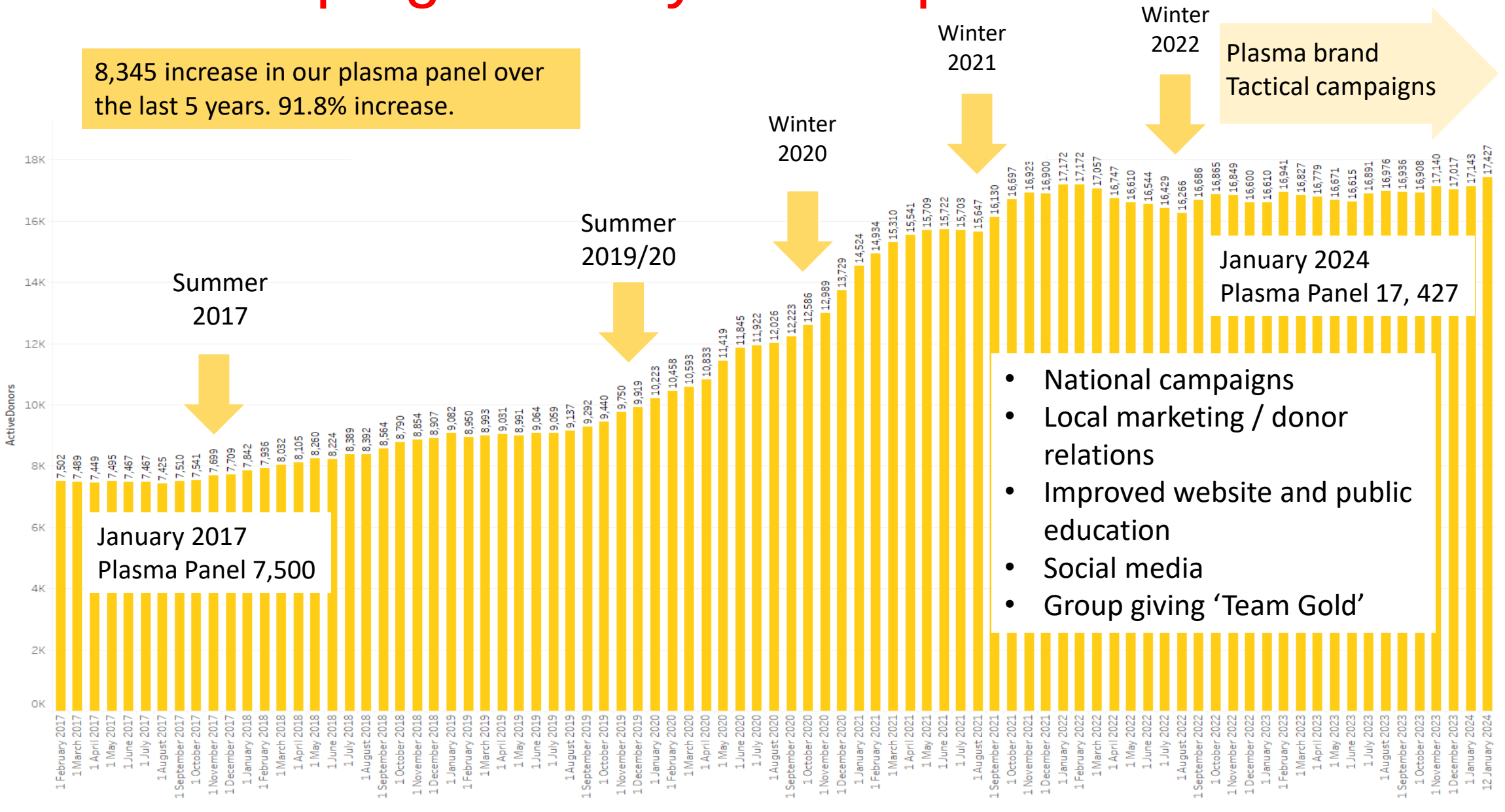
Gender



Age profile



Plasma campaign activity and impact



Zoster Immune Globulin

- Targeted campaign introduced in September
- Communications aimed at people who recently had shingles or chickenpox and medical professionals
- Achieved our 220kg Zoster specific plasma target in four months

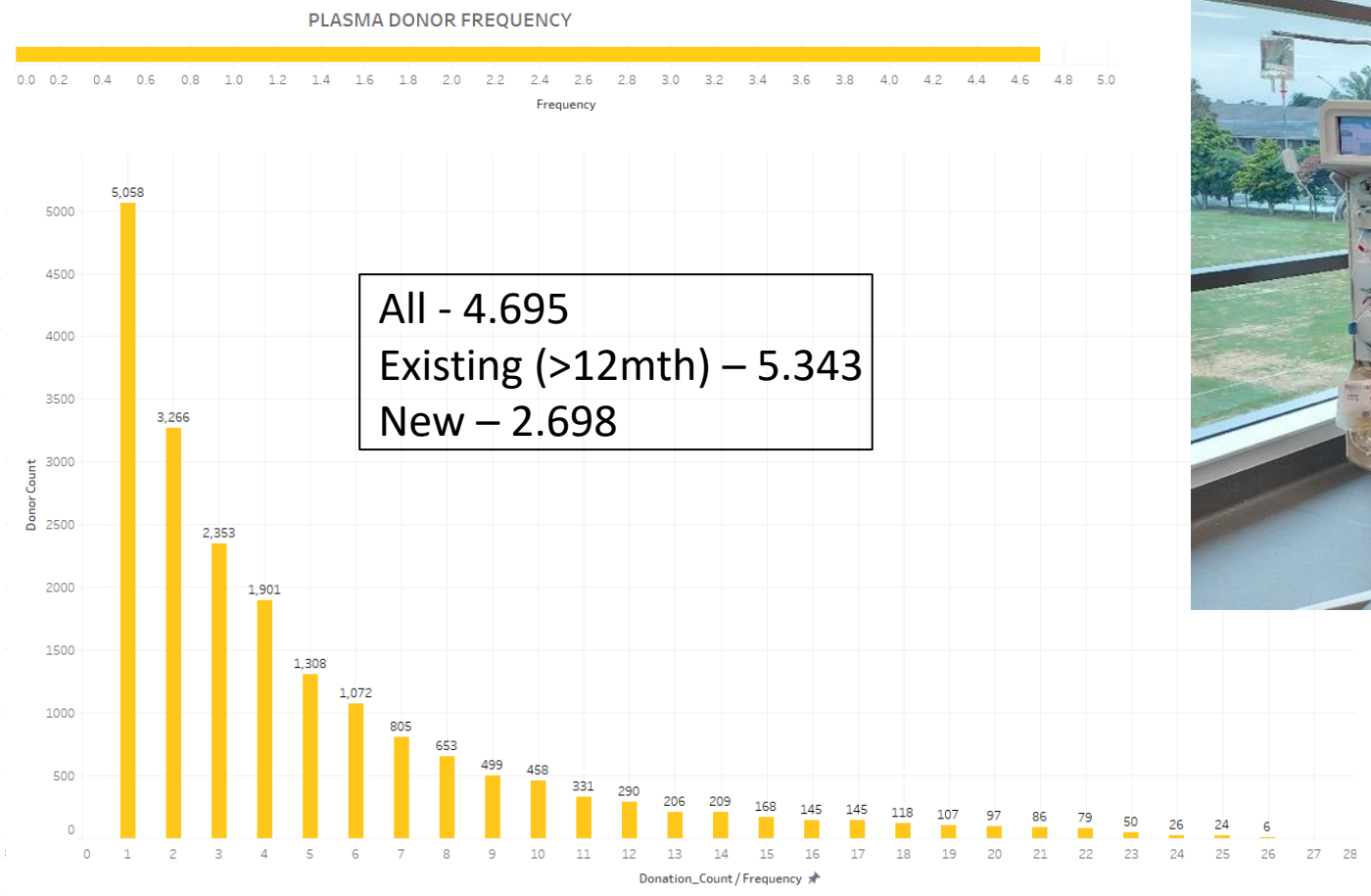


Removal of the vCJD ‘mad cow’ deferral



Donation frequency and retention

Plasma Donation Frequency per donor per year



All - 4.695
Existing (>12mth) – 5.343
New – 2.698



- Improved donor experience
- Upgraded centres / apheresis systems
- Extended opening hours
- Donor celebrations and incentives
- Bedside re-booking / new DRM
- Electronic health questionnaire in 2024

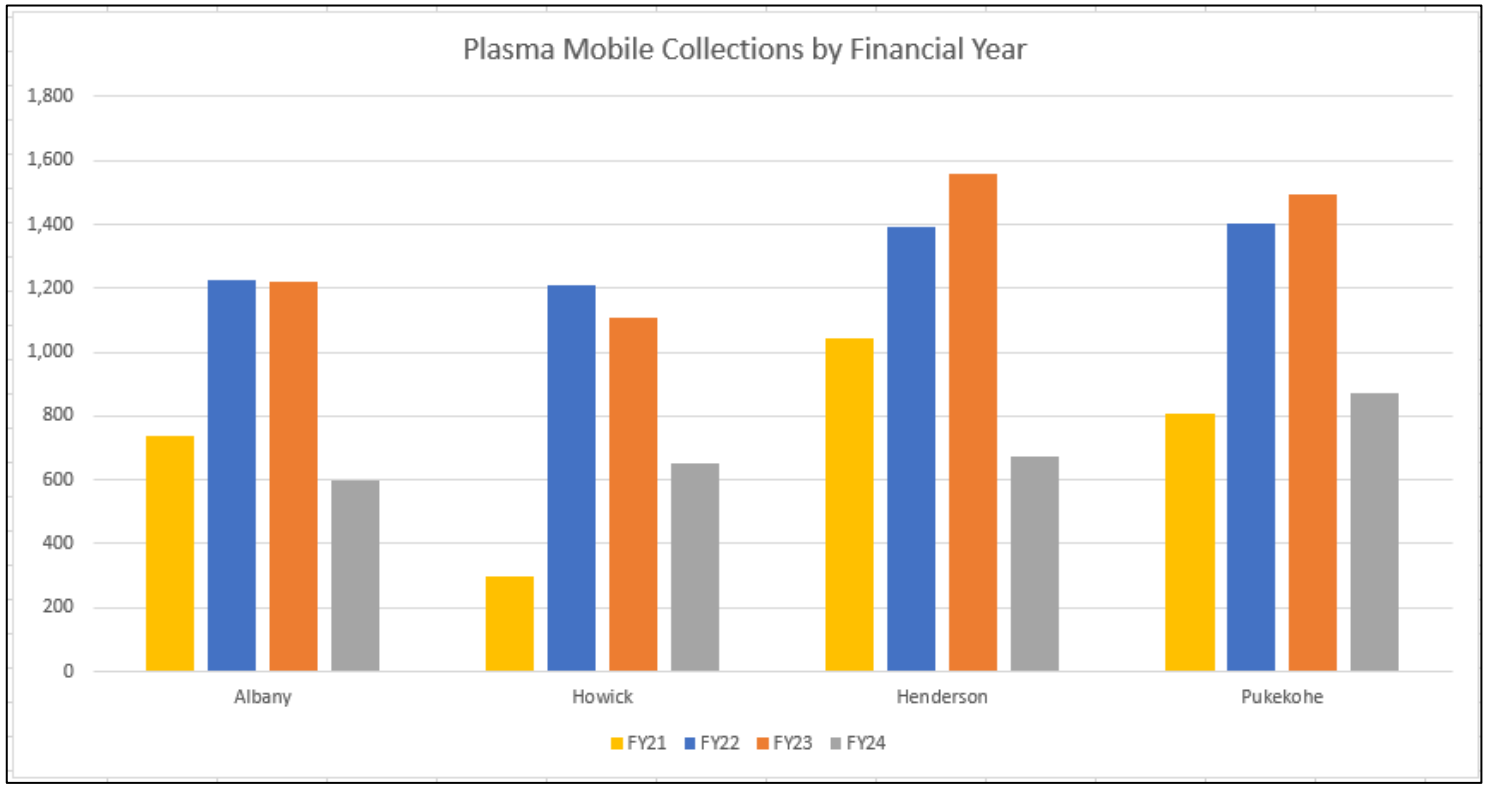
Improving Access - Mobile Plasma

- 4 Venues across Auckland
- 1 week / month – rotating venues
- Limits donation frequency to max 12 per year
- Effective for growing a donor panel
- 9 beds and 45 appointments per day, 5 days per week, target 150 per week



NZBLOOD
Te Ratonga Toto O Aotearoa

Plasma Mobile Collections



- New development as ‘long-term mobile’ in Henderson
- Potential permanent centre



Processing and Logistics

- Expansion limited by processing and freezing capacity
- Weekly plasma shipments (on dry ice) by air to CSL Behring in Melbourne
- 8-10 fractionation pools per year
- 10 tonne plasma ‘buffer’
- 3+ months finished product stock

New Zealand drink makers slash production as CO_2 shortage strikes

With manufacturing below full capacity and imports scarce, producers of CO_2 are prioritising critical medical and water customers



Auckland Plasma and Logistics Centre

- Plasma handling and freezing requirement
- Storage of finished product
- Capacity to support plasma shipment by sea
- Consumables storage
- National logistics contingency
- Opening mid-2024



Process Migration

CSL Behring Broadmeadows' Advanced Manufacturing Facilities



Process Migration – Product Portfolio

New Zealand's Current Domestic Plasma Products

INTRAGAM P (6% IVIG)
EVOGAM (16% SCIG)
ALBUMEX (4% and 20% Albumin)
PROTHROMBINEX-VF (3F PCC)



New Zealand's 'Process Migrated' Domestic Plasma Products

PRIVIGEN NZ (10% IVIg)
HIZENTRA NZ (20% SCIg)
ALBUREX NZ (5% and 20% Albumin)
BERIPLEX NZ (4F PCC)

Commercial Privigen and Hizentra retained
Alternative commercial IVIg product introduced

- BIOSTATE (FVIII) – 500IU retired, 1000IU retained
- THROMBOTROL-VF (ATIII) – replaced by a commercial alternative ATIII in 2023

NZBLOOD
Te Ratonga Toto O Aotearoa

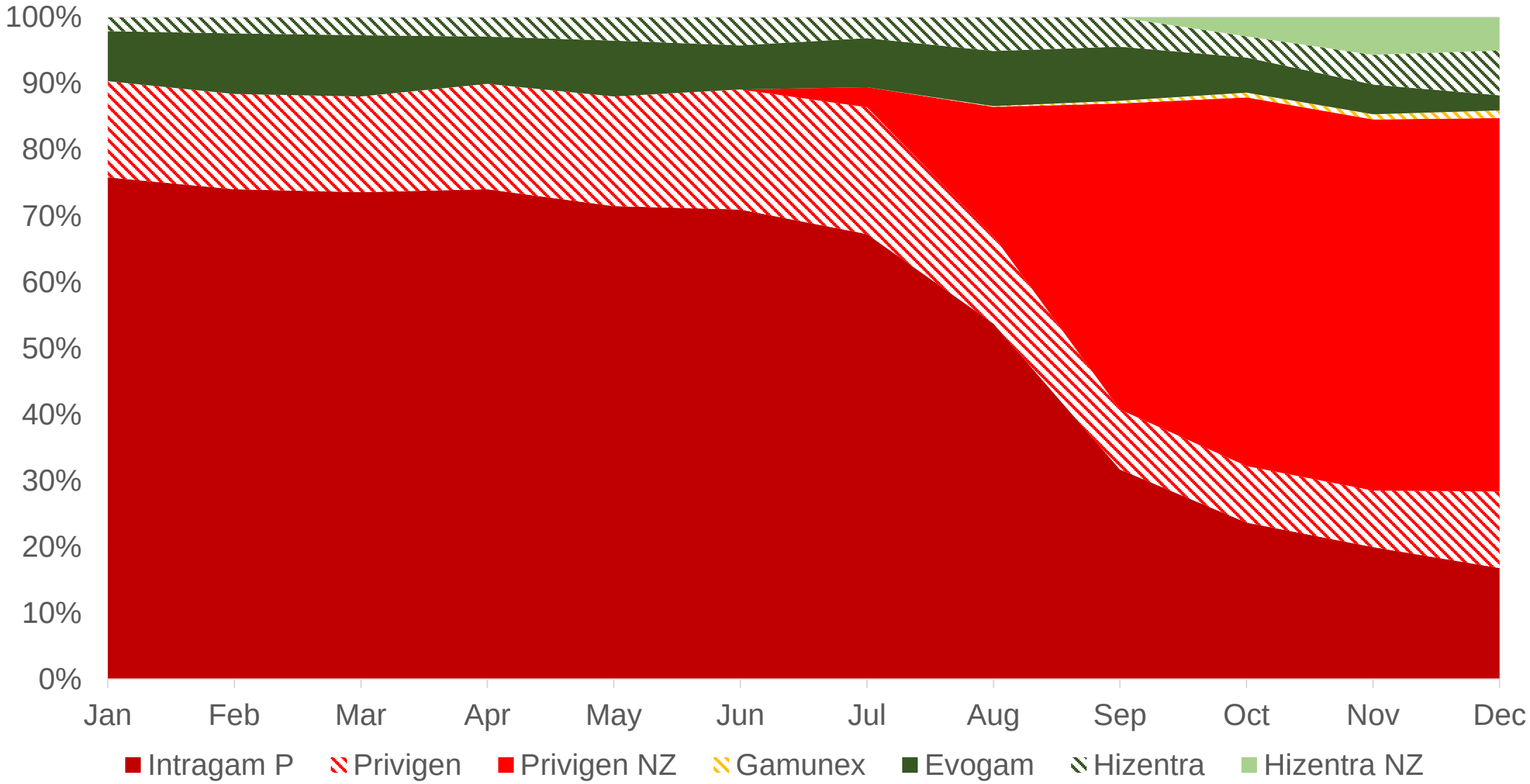
Planning and Training for Process Migration

- Education
- Information
- Identification of patients
- Approval of new doses
- Support for consent
- Pharmacovigilance refresher





Product Transition – Process Migration



Conclusion

Conclusion

What works in New Zealand?



Integrated and flexible system



Minimal bureaucracy



Close relationship with the health system



Fractionation partnership



Public / donor support



Supportive government / regulation

Key risks

- Donor recruitment
- Infrastructure issues
- Demand increases
- Escalating costs
- Supply chain
- Changing international plasma landscape

NZBLOOD
Te Ratonga Toto O Aotearoa


13
Thank you