



NATIONAL BLOOD AUTHORITY  
AUSTRALIA

# **NATIONAL REPORT ON THE ISSUE AND USE OF IMMUNOGLOBULIN (Ig)**

**ANNUAL REPORT 2022-23**





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# Introduction

Immunoglobulin (Ig) products, derived from pooled human plasma, are a precious and high-cost resource. Strengthening Ig governance is a priority for the National Blood Authority (NBA), and several measures are being developed and implemented to ensure the sustainability of these products into the future.

Immunoglobulin products analysed in this report include intravenous Ig (IVIg), subcutaneous Ig (SCIg), and normal human Ig (NHlg). Aggregated data for IVIg and SCIg are referred to as Ig unless specifically stated. Normal human Ig is reported separately. Immunoglobulin products are used to treat a broad range of conditions, with applications in replacement and immune modulation therapy. This report provides an analysis of national data on national Ig supply in Australia in 2022-23, also considering trends in supply over the last 10 years.

In Australia, it is estimated that over 99 per cent of all Ig is supplied under national blood arrangements through contracts administered by the NBA. The NBA's role is to coordinate national supply and demand planning for blood and blood products including supply risk management, purchasing blood and blood products on behalf of all Australian governments, developing and implementing national strategies to encourage better governance, promoting appropriate use of blood and blood products, and providing expert advice to support government policy development. Further background is at **Appendix A**.

The national Ig Governance Program was introduced in 2014 to pursue governments' objectives for Ig products funded and supplied under the national blood arrangements, namely to:

- ensure Ig product use and management reflects appropriate clinical practice and represents efficient, effective and ethical expenditure of government funds, in accordance with relevant national safety and quality standards for health care,
- ensure that access to Ig products is consistent with the criteria for access determined by governments, and
- improve the capture of information of the need for, use of, and outcomes of treatment with Ig products to inform future decisions.

The NBA is responsible for administering the National Ig Governance Program which includes the development and maintenance of a national framework to access government-funded Ig. The current framework comprises a National Policy, the criteria for access, and BloodSTAR (Blood System for Tracking Authorisations and Reviews), a national online system.

The *National Policy: Access to Government-Funded Immunoglobulin Products in Australia* (National Policy) released in November 2016, sets out the process that must be followed, and describes the rules and requirements that must be complied with to access government-funded Ig products in Australia. The National Policy supports all those involved in the prescription, use and management of Ig to understand their roles and responsibilities under the governance arrangements.

The *Criteria for the Clinical Use of Immunoglobulin in Australia* (the Criteria) was developed in collaboration with expert specialist clinicians and identify the medical conditions and circumstances for which the use of Ig is clinically appropriate and where there are no safe, effective and cost-effective alternative treatments. First published in 2007 (Version 1), with the second edition (Version 2) in 2012 and the third revision implemented in October 2018 (Version 3), the Criteria identifies the conditions and circumstances for which the use of Ig is funded under national blood arrangements. In the third edition, eligibility criteria were updated to align with new evidence and best clinical practice, along with other improvements to aid prescribers. Version 3 also reflects earlier updated access arrangements for SCIg and NHlg.

Version 3 of the Criteria clearly articulates and standardises the qualifying and continuing Ig access requirements. In 2022-23, product was dispensed for 134 specific conditions or 53 medical conditions and these were classified into 4 categories:

- (i) conditions for which Ig has an established therapeutic role
- (ii) conditions that have an emerging therapeutic role
- (iii) conditions where Ig has application in exceptional circumstances only
- (iv) conditions for which Ig should not be supplied under the national blood arrangements.

Introduced in 2016, BloodSTAR was developed by the NBA on behalf of all Australian Governments to serve the needs of health providers and support users to meet their obligations under the National Policy. Through BloodSTAR, persons in prescriber role can request patient authorisation for access to government-funded Ig. Under the governance arrangements, persons in dispenser roles may only dispense product to patients with an active authorisation in BloodSTAR. Nurses and midwives can request product from dispensers through BloodSTAR. BloodSTAR streamlines the authorisation process, reduces variability, standardises prescribing practices, and increases efficiency and transparency while strengthening decision-making and improving data capture. BloodSTAR implementation commenced in July 2016 and was completed in October 2018.

In addition to the clinical and diagnostic criteria for access to intravenous products, access to SCIg products is provided through an assurance framework for the appropriate use of the product. Subcutaneous Ig access rules are detailed on the NBA website at <https://www.blood.gov.au/SCIg>. Participation in the National SCIg program requires hospitals to establish their capability and capacity to manage a hospital based SCIg program, where the hospital provides access to all resources, and takes full accountability for the management and use of the product within defined governing requirements.

Normal human Ig may only be supplied for 2 purposes: (i) for the treatment of susceptible contacts of measles, hepatitis A, poliomyelitis and rubella (as directed by public health officials), or (ii) for the treatment of immunodeficiency conditions for which the product is indicated for patients for whom IVIg and SCIg are both contraindicated. Normal human Ig access rules are detailed on the NBA website at <https://www.blood.gov.au/NHIg>.

Immunoglobulin products should be prescribed and dispensed in accordance with the relevant state or territory legislative requirements. In-hospital management of Ig products must also be in accordance with the National Safety and Quality Health Service (NSQHS) Standards, in particular Standards 1, 2 and 7, and the Australian and New Zealand Society of Blood Transfusion (ANZSBT) *Guidelines for the Administration of Blood Products and Guidelines for Transfusion and Immunohaematology Laboratory Practice*.

Demand for Ig is met through domestic and imported Ig products. Domestic Ig is manufactured by CSL Behring (Australia) Pty Ltd (CSL Behring) using plasma collected from voluntary, non-remunerated Australian donations. Both domestic and imported Ig are distributed by the Australian Red Cross Lifeblood (Lifeblood).

Australia is in a unique position to provide analysis and commentary on the use of Ig due to national supply arrangements. This report begins with an analysis of Ig supply over the last 10 years, then considers patient demographics, expenditure on Ig, clinical indications for which Ig was supplied and finally analyses the dose prescribed for various conditions. The top 10 medical conditions account for about 88 per cent of all Ig supplied in 2022-23, and for this reason specific analysis focuses on these groups.

### Issues of Immunoglobulin

Immunoglobulin (including plasma for fractionation) comprises approximately 59 per cent of total blood expenditure in 2022-23. Growth since 2018-19 is shown below.

Table 1: Ig growth for the last 5 years

2018-19	2019-20	2020-21	2021-22	2022-23
7.2%	6.7%	7.4%	6.9%	7.9%

In 2022-23, a total of approximately 8.7 million grams of Ig was issued nationally at a cost of \$915.9 million (including the cost of plasma for fractionation). Of this amount, about 47 per cent of Ig was produced in Australia and 53 per cent was imported.

The NBA maintains arrangements with a diverse set of suppliers to secure a range of Ig products. Immunoglobulin products imported from overseas complement the supply of domestic plasma-derived products supplied by CSL Behring under the National Fractionation Agreement for Australia (NaFAA) and ensure that the overall clinical demand for blood products in Australia is met.

In 2021-22, 2 Ig products were manufactured domestically and supplied: Intragam 10% (IVIg) and Evogam (SCIg). Under the NaFAA, CSL has expanded its manufacturing facility to support the processing of Australia's plasma collections into plasma products. As a result, 5 of Australia's plasma products are changing between calendar years 2023 and 2024 including Intragam 10% and Evogam. In 2022-23, Intragam 10% commenced transitioning to Privigen AU. This transition is anticipated to be completed in 2024-25. Evogam will commence its transition to Hizentra AU in 2023-24 with an expected completion date of 2024-25.

There are 4 contracts in place for the supply of imported Ig under the national blood arrangements. These contracts commenced progressively from 1 January 2021 and will continue for up to 5 years, with extension options available. The suppliers are CSL Behring, Grifols Australia Pty Ltd (Grifols), Takeda Pharmaceuticals Australia Pty Ltd (Takeda) and Octapharma Pty Ltd (Octapharma). 5 Ig products were supplied under these contracts in 2022-23: Privigen (IVIg), Flebogamma (IVIg), Gamunex (IVIg), Cuvitru (SCIg), Octagam (IVIg), Kiovig (IVIg) and Hizentra (SCIg).

# Report Snapshot

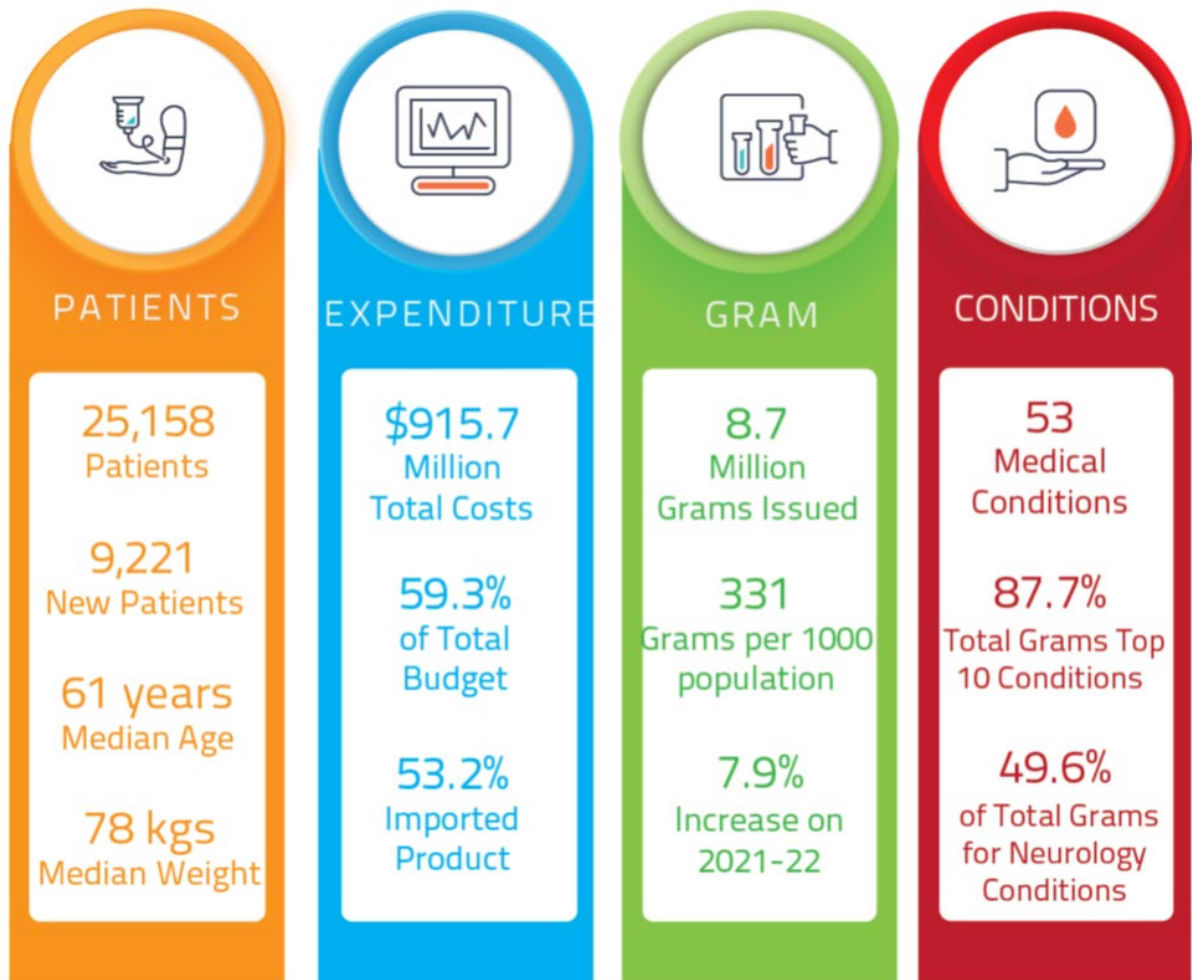


Figure 1: Snapshot

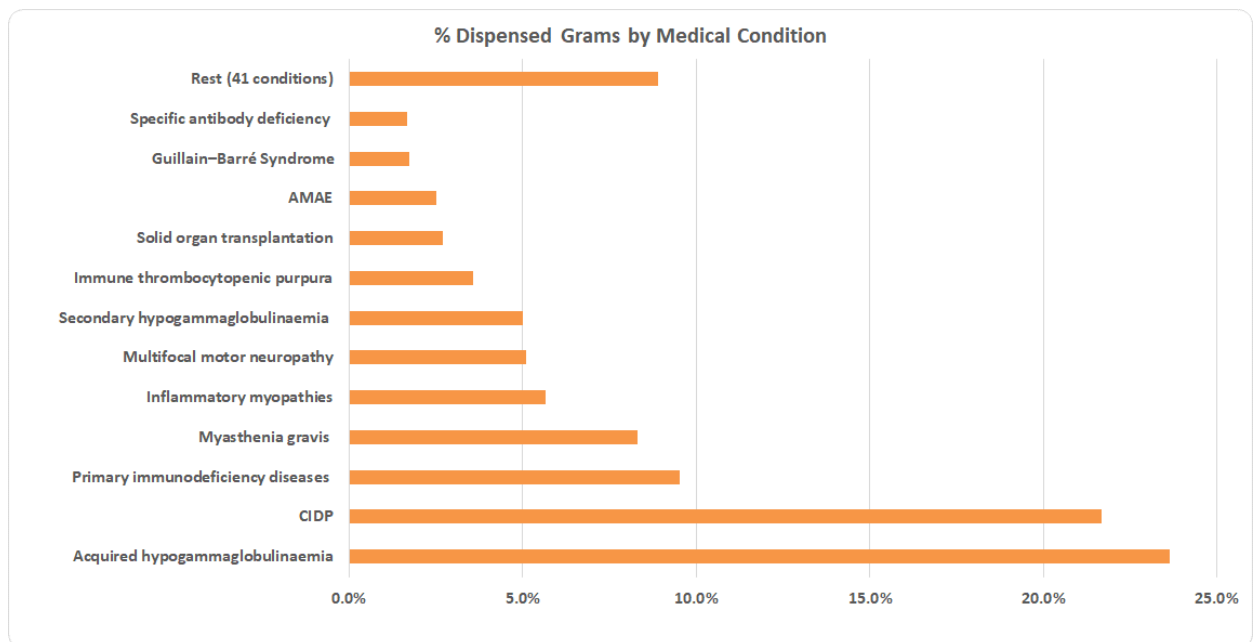


Figure 2: Per cent Issued grams by medical condition



# Methodology

Prior to 2016-17, authorisation and dispense data were collected by Lifeblood, and in 2016 states and territories commenced transition to using BloodSTAR as per Table 2. Lifeblood entered information on current patients and authorisations into BloodSTAR using information from Supply Tracking Analysis Recording System (STARS). These data are known as *legacy* data. When comparing data across time there are limitations to some data that may not be directly comparable due to changes in Criteria versions, or whether the data has come from BloodSTAR or STARS. More information about these differences can be found in the data quality section below.

**Table 2: Go live dates for BloodSTAR**

State and Territory	Go Live Date
Northern Territory	14 July 2016
South Australia	1 August 2016
Queensland	22 August 2016
Tasmania	14 September 2016
Victoria	26 September 2016
Australian Capital Territory	24 October 2016
Western Australia	5 December 2016
New South Wales	22 October 2018

The report includes some language that may be unique to the Australian environment. A list of acronyms and definitions used in this report is at **Appendix B**.

The Criteria groups together several specific conditions into one medical condition. For example, Primary Immunodeficiency Diseases (PID) is a medical condition in the Criteria, with this group incorporating several specific conditions. In some cases, the analysis will focus on the medical condition, while in other areas it will focus on the specific condition.

Each specific condition has been classified according to its allocated clinical speciality. It is acknowledged that for some specific conditions this classification could fit into more than one clinical speciality. For example, there are immunological conditions affecting the blood that could potentially be mapped to either immunology or haematology. Where there appears to be significant overlap between clinical specialities, the specific condition was mapped as agreed by the National Immunoglobulin Governance Advisory Committee (NIGAC). In most cases, the specific condition was mapped to the speciality most likely to be responsible for patients with that specific condition, noting that this can vary. **Appendix C** provides the mapping of specific condition to clinical speciality.

The summary of key items from the data file is provided for each specific condition at the state and territory level. The summary includes patient numbers, average age, average weight, grams of Ig used for the specific condition, grams per treatment episode and grams per 1,000 population (**Appendix D**). The source used for each figure and table is provided at **Appendix E**.

Note that the grams per 1,000 population measure shown in earlier reports, has been a poor indicator for benchmarking. Raw population figures do not consider the underlying population age structure, hospital usage patterns, and cross-border referrals; nor do total issues consider varying product wastage rates across time, and states and territories. A study done in South Australia (SA) in 2010 (Australian Health Review article - "Red alert - a new perspective on patterns of blood use in the South Australian public sector") shows this. It can be found at <https://www.publish.csiro.au/AH/AH10957>.

## DATA QUALITY

There are some factors relating to data quality, which need to be considered when reading this report. These factors are:

- The reconciliation of data held in STARS, BloodSTAR/BloodNet and Integrated Data Management System (IDMS) indicates minor variances at a national level. In some cases, these differences can be explained by product being ordered and recorded in IDMS the month prior to product being dispensed to a patient.
- Patient and authorisation data for some records are incomplete. For example, data from STARS and BloodSTAR may not include weight. Legacy data entered in BloodSTAR did not include weight.
- The Australian Bureau of Statistics (ABS) Australian Demographic Statistics (cat. No 3101.0) was used from 2011-12.
- Care should be taken when interpreting the data relating to the smaller states and territories, since one or 2 patients can overly influence the use as compared to larger states.
- There has been no adjustment for Ig dispensed in one state or territory for patients residing in a different state or territory.
- States and territories are based on the state or territory of the facility which dispensed the product, not the treating facility state or territory.
- The STARS data have age and weight data recorded at treatment dates (first reported in 2009-10). This data changes over time. Weight data is complete in 2018-19 based on the transition to BloodSTAR.
- Age data are based on the patient's age on 1 January each year for both STARS and BloodSTAR.
- Episodes in STARS were known as Treatment Episodes and in BloodSTAR these are known as Dispense Events. In this document we have used Dispense Events.
- Patient counts are distinct counts and will not sum for National or total rows and columns, as patients may have:
  - More than one specific condition
  - product dispensed in more than one state or territory
  - dispense events recorded at both a private facility and at a public facility
  - received a number of different products due to fulfilling the product allocation process
  - new products transitioned for CSL Behring
  - received IVIg and SCIg, or
  - received both domestic and imported product.
- Transitioning to new products and the refinement of the product allocation process have increased the discrepancies between the distinct patient counts at product level and the totals. In some cases, grams issued or dispensed may not total as the aggregate may be round to the nearest integer.
- Earlier versions of the Criteria classified medical conditions into 4 Chapters based on the level of evidence supporting the use of Ig. In BloodSTAR, these are known as Categories and are used in reporting from 2020-21.
- Previous annual reporting for Ig named conditions as Primary Diagnosis or grouped conditions as Disease Category. In BloodSTAR, these are known as Specific Conditions or Medical Conditions

respectively. Conditions were also grouped to Disciplines previously and these are now known as Specialities in BloodSTAR.

- Dispensed data can be entered into BloodSTAR at any time if there is a valid and active authorisation. This means that a Dispense Event may be recorded in one month and the actual Dispense Event was in another month, which means data for 2021-22 could be recorded in 2022-23.
- To maintain the anonymity of individual patients and health providers, data showing less than 5 may be suppressed or aggregated if there is a potential to re-identify or exceptions are agreed between national and state/territory data custodians.

This report uses data from 3 primary sources, as follows:

1. Data collected by the NBA on the units of Ig issued to Australian Health Providers (AHPs) and purchases from suppliers. These data are held in the NBA's IDMS.
2. Data collected by Lifeblood under contractual arrangements with the NBA on behalf of all Australian governments. These data are collected either when an order is placed for Ig or is collected following the treatment where product is issued as imprest stock. The data are collected into Lifeblood's STARS database, and
3. Data collected by the NBA on the units dispensed by AHPs to be administered to the patient. The data are collected into the NBA's BloodNet and BloodSTAR systems.

**Table 3** shows the reconciliation between the 3 systems used for this report. A variance of 2.5 per cent represents less than one week of issues. This difference relates to timing of data entry or product held as imprest stock.

**Table 3: Grams recorded in the different systems held by the NBA**

	Total Issued Grams	BloodSTAR Dispensed Grams	Difference Grams	Difference %
NSW	2,987,650	2,859,161	128,489	4.3%
VIC	1,957,846	1,928,487	29,359	1.5%
QLD	2,081,679	2,059,292	22,387	1.1%
SA	480,454	473,827	6,627	1.4%
WA	722,997	700,517	22,480	3.1%
TAS	201,464	200,544	920	0.5%
NT	42,153	41,925	228	0.5%
ACT	209,487	205,951	3,536	1.7%
Other	970	355.00	615	63.4%
<b>Total</b>	<b>8,684,700</b>	<b>8,470,059</b>	<b>214,641</b>	<b>2.5%</b>

*\*Note: Includes NHlg and Other is Norfolk Island*

# Trends

## DEMAND TRENDS

In 2022-23, a total of 8,684,700 grams of Ig was issued, representing an increase of 632,716 grams (7.9 per cent) over 2021-22. Prior to 2018-19, the increase in Ig use averaged 11 per cent, with the greatest proportion of that increase comprising imported products (Figure 3).

While a proportion of this increase may be attributable to population increases, there has also been a steady increase in the use of Ig per 1,000 population since the introduction of the Criteria in 2008.

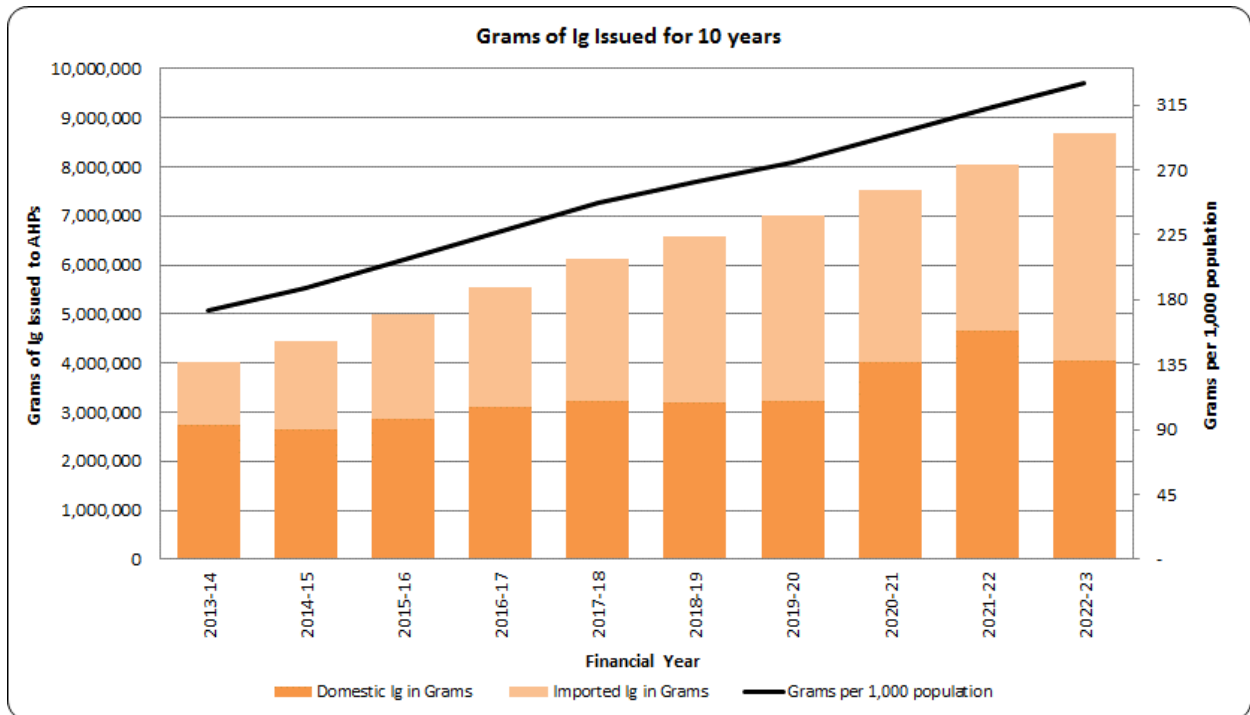


Figure 3: Ten-year trend in issues of Ig

A breakdown of the change per year in grams issued by state and territory is provided in **Table 4**.

Over the past 10 years, Western Australia (WA) has been growing at the fastest rate at an average of 13 per cent.

Table 4: Percentage change in grams issued over time by state and territory

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
2013-14	10%	11%	12%	15%	6%	14%	1%	12%	<b>11%</b>
2014-15	9%	11%	12%	7%	12%	8%	8%	8%	<b>10%</b>
2015-16	14%	10%	14%	11%	17%	2%	36%	3%	<b>12%</b>
2016-17	14%	11%	8%	10%	18%	4%	6%	7%	<b>11%</b>
2017-18	11%	12%	10%	5%	9%	21%	23%	13%	<b>11%</b>
2018-19	9%	8%	4%	7%	5%	8%	0%	19%	<b>7%</b>
2019-20	4%	7%	7%	7%	16%	9%	-11%	18%	<b>7%</b>
2020-21	8%	5%	6%	6%	16%	12%	0%	12%	<b>7%</b>
2021-22	5%	9%	3%	16%	18%	5%	33%	2%	<b>7%</b>
2022-23	7%	10%	5%	10%	9%	14%	14%	15%	<b>8%</b>
<b>Average last 10 years</b>	<b>9%</b>	<b>9%</b>	<b>8%</b>	<b>9%</b>	<b>13%</b>	<b>10%</b>	<b>11%</b>	<b>11%</b>	<b>9%</b>

## FINANCIAL TRENDS

Total expenditure on Ig (excluding plasma for fractionation) in 2022-23 was \$611.3 million, an increase of \$105.9 million (about 21 per cent) over 2021-22 (**Figure 4**). The increased expenditure predominately represents increases in demand and increasing imported Ig prices.

There is a continuing increase in the price of plasma for fractionation due to the increased ratio of apheresis to whole blood plasma for fractionation being supplied, resulting in an increase in the cost of domestic Ig.

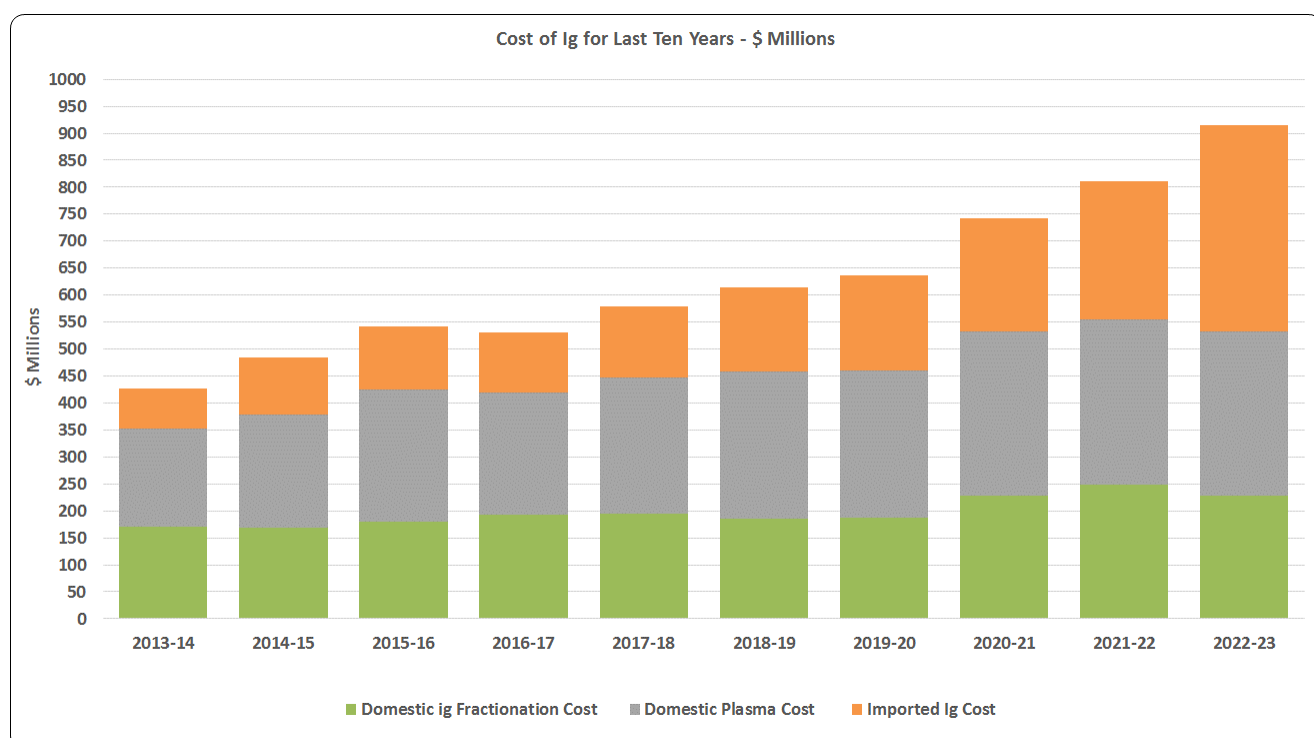
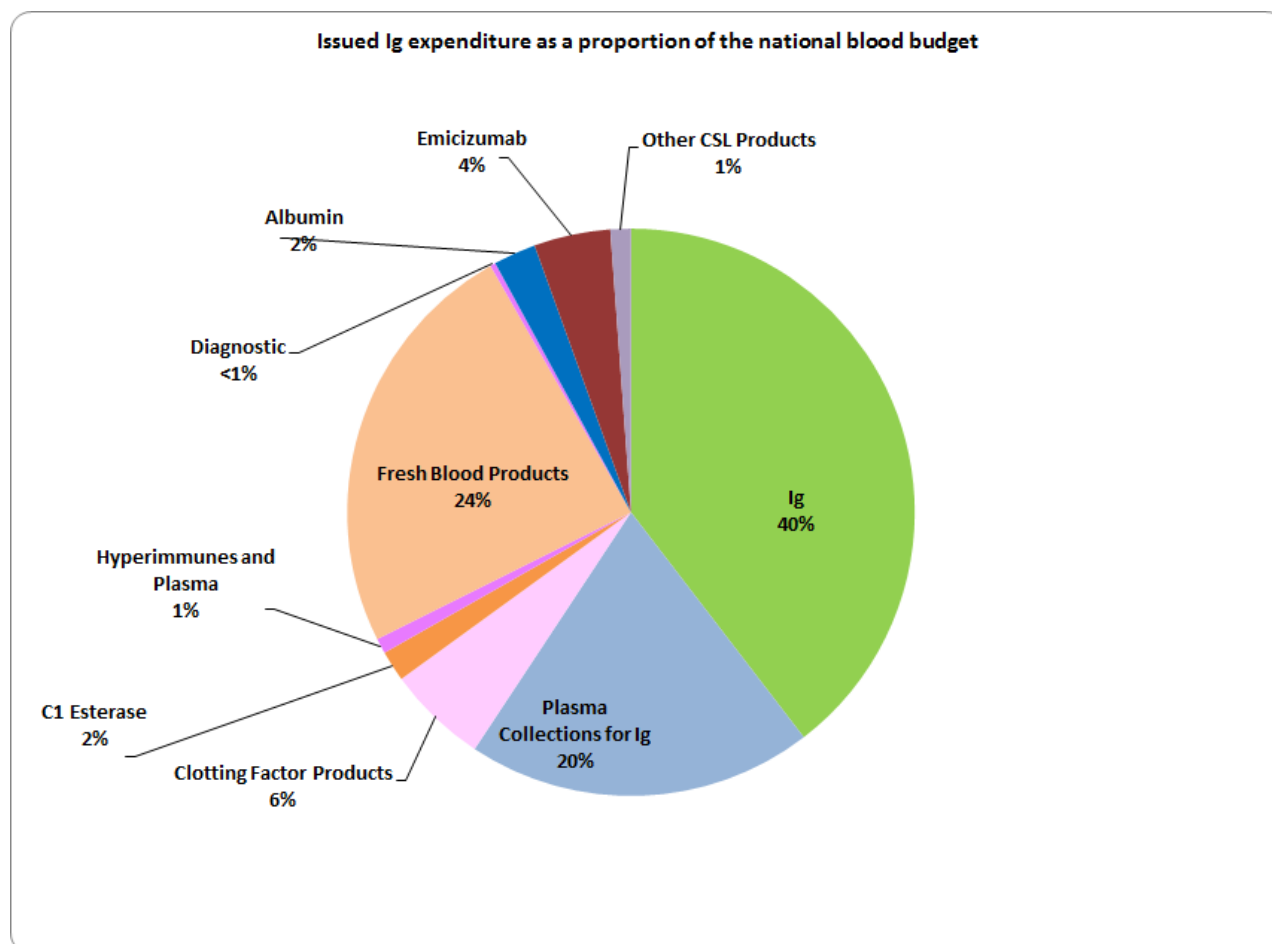


Figure 4: Ten-year trend in expenditure on Ig

In Australia, the total cost of domestic Ig supply comprises the cost of the plasma collected by Lifeblood, plus the cost of purchase of the finished Ig product from the supplier (CSL Behring). Imported Ig product is purchased at a total product cost only.

The cost of Ig as a proportion of the national blood budget is shown at **Figure 5**. Immunoglobulin is the largest budget item, representing 40 per cent of the total budget for blood and blood products. Combined with expenditure for plasma for fractionation, Ig accounts for approximately 60 per cent of the total blood budget, at a total expenditure of \$915.7 million (excluding specific hyperimmune plasma for fractionation used in the production of finished hyperimmune products).



**Figure 5: Ig expenditure as a proportion of the national blood budget**

Of the Ig supplied under national blood arrangements in Australia in 2022-23, 47 per cent was manufactured domestically and 53 per cent was imported from overseas (**Table 5**). This represents a 35.8 per cent increase in product importation from 2021-22. Domestic supply is driven by the amount of plasma for fractionation collected in Australia, and this increased by 2.8 per cent in 2022-23 over 2020-21. Intragam 10% (IVIg), Privigen AU (IVIg) and Evogam (SCIg) were Ig products manufactured domestically in 2022-23.

The imported products available were Privigen (IVIg), Flebogamma (IVIg), Gamunex (IVIg), Cuvitru (SCIg), Octagam (IVIg), Kiovig (IVIg) and Hizentra (SCIg). When a patient is allocated to receive one of the imported products, the clinician may choose a product different to that allocated by BloodSTAR if there is a valid clinical reason. Supply of Privigen constituted about 56.5 per cent of the supply of imported Ig.

**Table 6** shows the split between Ig issues for domestic and imported products, by public and private AHPs for 2022-23.

Table 5: Issues of domestic Ig compared with imported Ig

			NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Domestic Ig	Intragam 10	g	1,164,678	745,470	866,050	188,238	260,643	74,713	11,988	64,358	<b>3,376,135</b>
	Privigen AU	g	231,450	151,440	101,695	43,705	46,560	16,040	2,730	12,945	<b>606,565</b>
	Evogam	g	24,024	16,312	22,318	12,769	3,928	813	514	1,958	<b>82,635</b>
	<b>Total Domestic</b>	<b>g</b>	<b>1,420,152</b>	<b>913,222</b>	<b>990,063</b>	<b>244,711</b>	<b>311,131</b>	<b>91,565</b>	<b>15,231</b>	<b>79,260</b>	<b>4,065,335</b>
Imported Ig	<b>Total Imported</b>	<b>g</b>	<b>1,567,499</b>	<b>1,044,624</b>	<b>1,091,616</b>	<b>235,743</b>	<b>411,867</b>	<b>109,899</b>	<b>26,922</b>	<b>130,227</b>	<b>4,618,395</b>
<b>Ig Cost excluding the cost of plasma for fractionation</b>		<b>\$(m)</b>	<b>\$209.7</b>	<b>\$137.9</b>	<b>\$146.1</b>	<b>\$33.3</b>	<b>\$51.6</b>	<b>\$14.3</b>	<b>\$3.1</b>	<b>\$15.2</b>	<b>\$611.3</b>
<b>Proportion of domestic to imported Ig</b>		<b>g%</b>	<b>48%</b>	<b>47%</b>	<b>48%</b>	<b>51%</b>	<b>43%</b>	<b>45%</b>	<b>36%</b>	<b>38%</b>	<b>47%</b>

Note: \$(m) excludes the costs for plasma for fractionation

Note: Excludes Norfolk Island

Table 6: Issues of domestic Ig compared with imported Ig and public versus private Australian Health Providers

			NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Domestic Ig	Public	g	1,007,576	563,163	369,650	201,312	218,220	46,240	15,231	71,665	2,493,057
	Private	g	412,576	350,059	620,413	43,399	92,911	45,325	-	7,595	1,572,279
	<b>Total Domestic</b>	<b>g</b>	<b>1,420,152</b>	<b>913,222</b>	<b>990,063</b>	<b>244,711</b>	<b>311,131</b>	<b>91,565</b>	<b>15,231</b>	<b>79,260</b>	<b>4,065,335</b>
Imported Ig	Public	g	1,247,544	699,479	545,089	210,558	333,178	76,767	26,922	120,617	3,261,122
	Private	g	319,955	345,145	546,527	25,185	78,689	33,132	-	9,610	1,358,243
	<b>Total Imported</b>	<b>g</b>	<b>1,567,499</b>	<b>1,044,624</b>	<b>1,091,616</b>	<b>235,743</b>	<b>411,867</b>	<b>109,899</b>	<b>26,922</b>	<b>130,227</b>	<b>4,619,365</b>
Total Ig	Public	g	2,255,120	1,262,641	914,739	411,870	551,397	123,007	42,153	192,282	5,754,179
	Private	g	732,530	695,204	1,166,940	68,584	171,600	78,457	-	17,205	2,930,521
	<b>Total Ig</b>	<b>g</b>	<b>2,987,650</b>	<b>1,957,846</b>	<b>2,081,679</b>	<b>480,454</b>	<b>722,997</b>	<b>201,464</b>	<b>42,153</b>	<b>209,487</b>	<b>8,684,700</b>
Ig as portion of National	Public	g%	39%	22%	16%	7%	10%	2%	1%	3%	100%
	Private	g%	25%	24%	40%	2%	6%	3%	0%	1%	100%
	<b>Total Ig</b>	<b>g%</b>	<b>34%</b>	<b>23%</b>	<b>24%</b>	<b>6%</b>	<b>8%</b>	<b>2%</b>	<b>0%</b>	<b>2%</b>	<b>100%</b>
	<b>% of Population</b>		<b>31%</b>	<b>25%</b>	<b>20%</b>	<b>7%</b>	<b>11%</b>	<b>2%</b>	<b>1%</b>	<b>2%</b>	<b>100%</b>
Grams Per 1,000 Population	Public		278.6	192.5	173.7	228.0	199.6	215.9	169.1	424.2	223.4
	Private		90.5	106.0	221.6	38.0	62.1	137.7	-	38.0	113.8
	<b>Total Ig</b>		<b>369.1</b>	<b>298.5</b>	<b>395.4</b>	<b>265.9</b>	<b>261.7</b>	<b>353.6</b>	<b>169.1</b>	<b>462.1</b>	<b>337.1</b>

Note: Excludes Norfolk Island



# Patient demographics

## PATIENT NUMBERS

A total of 25,158 patients were dispensed Ig under the national blood arrangements during 2022-23 and 9,221 were new patients. This represents an 8.8 per cent increase in the number of patients since 2021-22 compared to about a 9.1 per cent increase in 2021-22 over 2020-21. A summary of new and total patient numbers is provided in **Figure 6**.

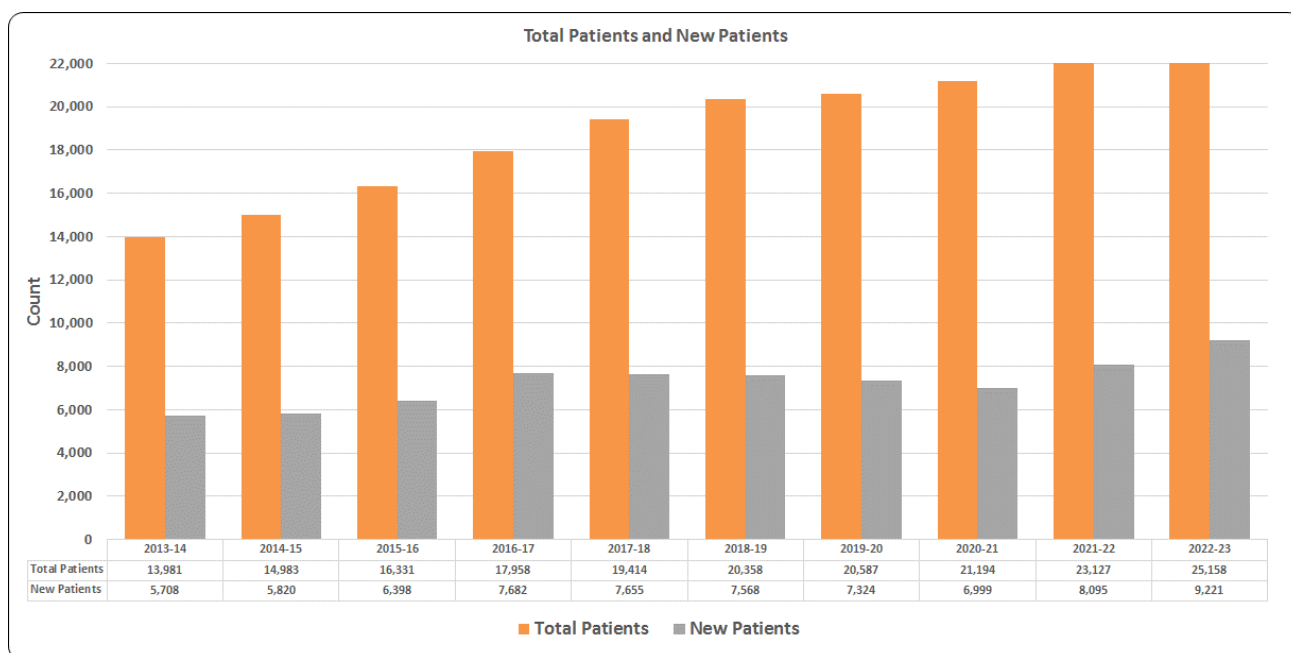


Figure 6: New and total patients for the last 10 years

The number of patients per 1,000 population dispensed Ig varies between state and territory. Complete data for specific conditions by state and territory can be found at **Appendix D**.

**Table 7** shows a breakdown of the proportion of patients in each state and territory with a comparison to the proportion of the population in each state and territory.

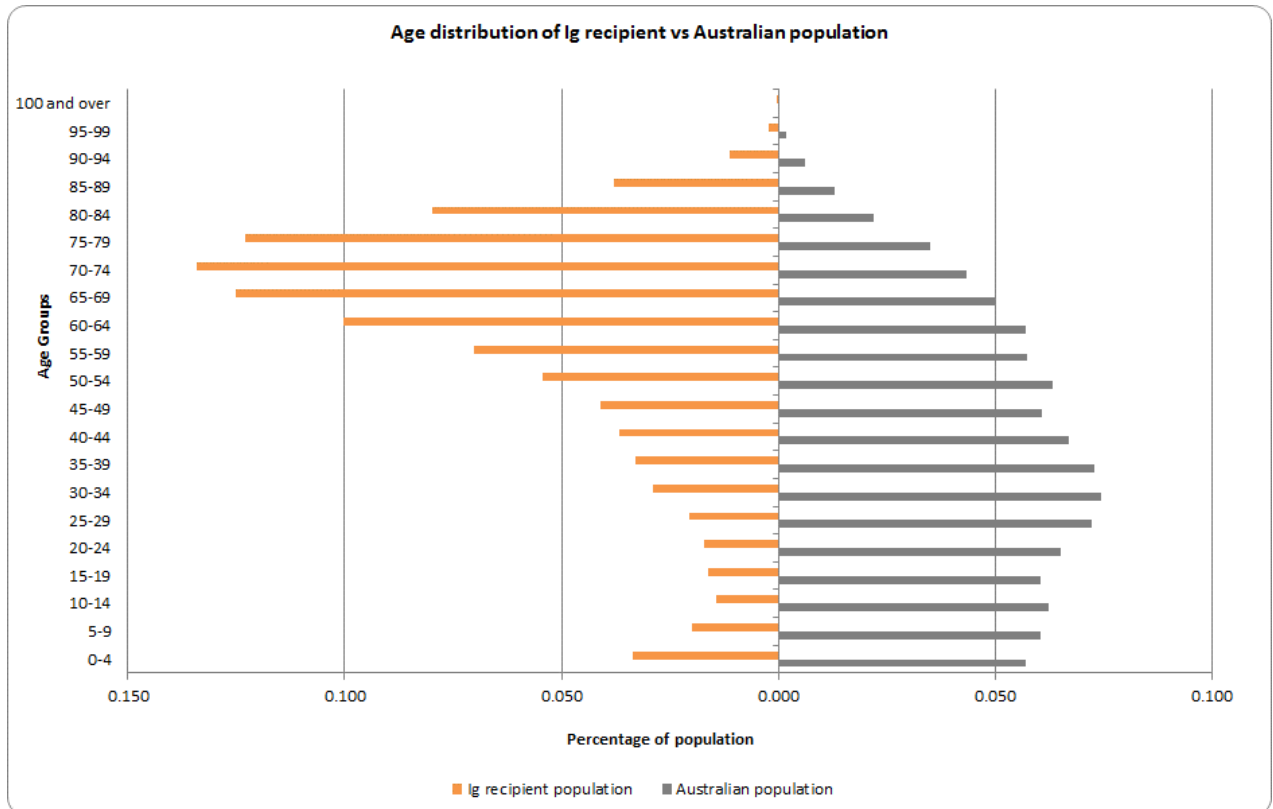
Table 7: Patient numbers by state and territory

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
<b>2021-22</b>									
Patient Counts	8,311	5,245	5,551	1,427	1,795	495	138	520	23,127
New Patients	2,918	2,010	1,557	599	699	133	71	158	8,095
Population	8,095,430	6,559,941	5,265,043	1,806,599	2,762,234	569,827	249,345	453,324	25,761,743
Proportion of Population	31.4%	25.5%	20.4%	7.0%	10.7%	2.2%	1.0%	1.8%	
Patients per 1,000 Population	1.03	0.80	1.05	0.79	0.65	0.87	0.55	1.15	0.90
<b>2022-23</b>									
Patient Counts	8,839	6,002	5,867	1,609	1,904	597	160	533	25,158
New Patients	3,227	2,471	1,769	676	673	213	78	172	9,221
Population	8,238,801	6,704,281	5,378,277	1,834,275	2,825,178	571,596	250,149	460,855	26,263,412
Proportion of Population	31.4%	25.5%	20.5%	7.0%	10.8%	2.2%	1.0%	1.8%	
Patients per 1,000 Population	1.07	0.90	1.09	0.88	0.67	1.04	0.64	1.16	0.96
% Change in Patients	6.4%	14.4%	5.7%	12.8%	6.1%	20.6%	15.9%	2.5%	8.8%
% Change in New Patients	10.6%	22.9%	13.6%	12.9%	-3.7%	60.2%	9.9%	8.9%	13.9%

## AGE AND WEIGHT

The distribution of estimated age is shown in **Figure 7**, where it is compared with the age distribution of the Australian population as at September 2022.<sup>1</sup> A peak can be seen in the patient population treated with Ig, with most Ig recipients over 55. The ageing population is expected to place a greater burden on Ig demand into the future, with the proportion of the world’s population over 60 years expected to more than double between 2015 and 2050.<sup>2</sup>

Immunoglobulin dosing is dependent on the weight of the patient. For many conditions, the patient weight determines the initial dosing, with maintenance therapy titrated against IgG levels and the patient’s clinical response to therapy.



**Figure 7: Patient age relative to Australian average**

*Note: The above figure calculations relate to only 2022-23 patients.*

**Figure 7** compares the age of Ig recipients in Australia in 2022-23 and the Australian population using stats from the ABS 3101.

The amount of Ig prescribed for a patient may vary depending on the indication as well as a patient’s weight and is set out in the Criteria. When prescribing Ig, persons in the prescriber role should aim to use the lowest dose possible that achieves the appropriate clinical outcome for each patient. The dose may be adjusted for Ideal Body Weight (IBW) for some patients. A calculator is available in BloodSTAR to facilitate this where appropriate.

<sup>1</sup> ABS 3101

<sup>2</sup> World Health Organization, [Ageing and health \(who.int\)](https://www.who.int)

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With an increasingly obese population, we may expect increases in demand if total (rather than ideal) body weight dosing is continued. Reviews conducted of the literature relating to lean body mass dosing should be considered for future research.

Care should be taken when analysing the weights, since not all patients have weight recorded and for those that do, the weight recorded may not be recent.

**Table 8** shows the number of distinct patients and the average weight by age ranges for patients with dispenses in 2022-23.

**Table 8: Patient numbers and average weight by age range**

Age Range	Patient Counts	Average Weight (kg)	Treatment Episodes	Grams Dispensed
0-4	846	13	2,991	26,905
5-9	502	25	3,186	43,529
10-14	361	47	3,549	65,034
15-17	235	62	2,450	68,497
18-19	172	65	1,883	52,418
20-29	949	75	10,353	281,524
30-39	1,555	80	17,502	542,417
40-49	1,958	81	24,378	765,641
50-59	3,133	84	40,005	1,266,338
60-69	5,671	82	68,407	2,082,106
70-79	6,463	79	76,320	2,278,614
80-89	2,965	75	32,319	913,347
90 or more	348	69	3,243	83,688
<b>Total</b>	<b>25,158</b>	<b>78</b>	<b>286,586</b>	<b>8,470,059</b>

# Ig Dispenses

## IG DISPENSES BY CRITERIA CATEGORY

The Criteria classifies medical conditions into 4 categories based on the level of evidence supporting the use of Ig, as follows:

- conditions for which Ig has an established therapeutic role
- conditions for which Ig has an emerging therapeutic role
- conditions for which Ig has application in exceptional circumstances only
- conditions for which Ig use is not supported.

Immunoglobulin was predominately dispensed for medical conditions within *Conditions for which Ig has an established therapeutic role*. Refer to **Appendix D** for further information.

**Table 9: Ig grams dispensed by criteria category**

Category	2018-19	2019-20	2020-21	2021-22	2022-23
Has an established therapeutic role	5,406,598	5,760,834	6,143,262	6,465,105	6,911,982
Has an emerging therapeutic role	792,821	908,889	1,046,454	1,142,519	1,291,360
Has application in exceptional circumstances only	246,231	181,777	220,762	261,544	266,435
Use is not supported	453	1,890	1,888	1,633	283
<b>Total</b>	<b>6,446,102</b>	<b>6,853,389</b>	<b>7,412,365</b>	<b>7,870,800</b>	<b>8,470,059</b>

While Ig may be dispensed without an approved authorisation in life threatening situations (including prior to a confirmed diagnosis or in situations where the diagnosis is unclear at the time of treatment), under the National Policy, an authorisation for access must be submitted retrospectively. The *'Conditions for which Ig use is not supported'* dispenses generally reflect situations where a retrospective authorisation request identified Ig was used in an emergency to treat a condition that is not supported, or not mentioned in the Criteria.

## IG DISPENSES BY SPECIALITY

Medical conditions are classified under a medical speciality. The key specialities are Neurology, Haematology and Immunology. Other is the total for Nephrology, Transplant Medicine, and Dermatology specialities.

All prescribers are responsible for registering for access to BloodSTAR at each hospital/health facility where they practice and/or are employed. Medical specialists must have their speciality field of practice registered with the Australian Health Practitioner Regulation Agency (AHPRA) for the specialty field to be recognised for the purposes of meeting eligibility requirements as specified in the Criteria.

Since 2018-19, there has been a 32.6 per cent increase in Ig issues for neurological conditions, as compared with a 27.8 per cent increase for haematological conditions and a 36.7 per cent increase for immunological conditions.

The variation across states and territories in number of new and total patients, and the amount of Ig dispensed per clinical speciality is illustrated in **Tables 10 to 12** for 2022-23.

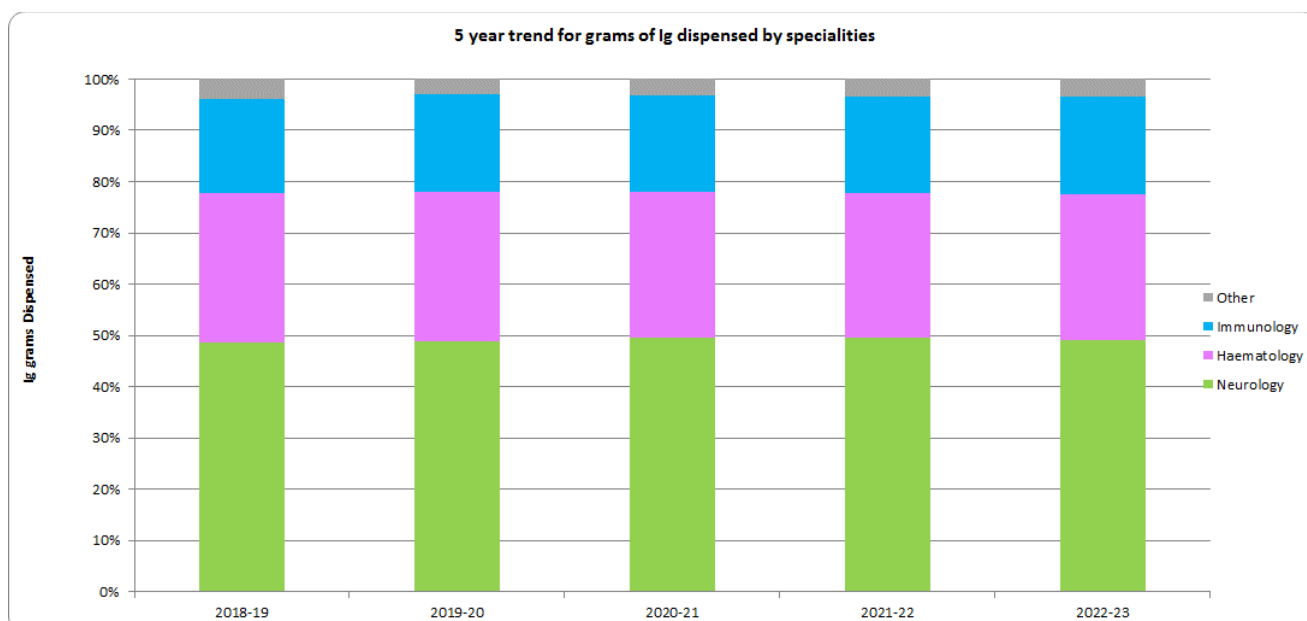


Figure 8: Grams of Ig dispensed by speciality

The data also illustrates the variation between states and territories in the relative amount of Ig used per patient for the same speciality. For example, about 36 per cent of WA’s Ig patients are haematology patients, using about 20 per cent of the state’s total Ig issue in 2022-23. The reason for this inter-state and territory variation is unknown, but it may represent differences in clinical practice, differing disease profiles in the patient populations, variable access to alternative therapies, or differences due to the availability of specialist services across Australia.

Table 10: Ig grams dispensed by speciality and state and territory for 2022-23

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Dermatology*	14,753	20,408	15,190	6,700	6,465	1,820	-	3,235	68,570
Haematology	725,912	535,566	680,767	196,248	139,630	79,307	7,391	33,240	2,398,060
Immunology	602,416	365,869	354,561	78,819	135,245	26,152	5,700	44,139	1,612,901
Neurology	1,492,344	860,410	988,561	180,717	410,740	78,830	26,985	123,917	4,162,503
Transplant Medicine*	23,738	146,235	20,213	11,343	8,438	14,435	1,850	1,420	227,670
<b>Total</b>	<b>2,859,161</b>	<b>1,928,487</b>	<b>2,059,292</b>	<b>473,827</b>	<b>700,517</b>	<b>200,544</b>	<b>41,925</b>	<b>205,951</b>	<b>8,469,704</b>

\*Included as Other in Figure 8

Table 11: Patients dispensed Ig by speciality and state and territory for 2022-23

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Dermatology*	16	34	21	6	9	<5	-	<5	<96
Haematology	3,270	2,385	2,545	848	678	292	45	145	10,091
Immunology	2,180	1,406	1,189	315	493	101	38	139	5,789
Neurology	3,274	1,839	2,064	407	695	174	68	240	8,607
Transplant Medicine*	164	374	67	38	39	30	9	9	719
<b>Total</b>	<b>8,839</b>	<b>6,002</b>	<b>5,867</b>	<b>1,609</b>	<b>1,904</b>	<b>&lt;601</b>	<b>160</b>	<b>&lt;536</b>	<b>25,158</b>

\*Included as Other in Figure 8

Table 12: New patients dispensed Ig by speciality and state and territory for 2022-23

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Dermatology*	<5	18	<5	<5	-	-	-	<5	<38
Haematology	1,444	1,063	805	380	269	105	23	60	4,123
Immunology	597	597	345	119	151	40	23	25	1,891
Neurology	1,099	643	583	161	234	58	26	82	2,865
Transplant Medicine*	110	163	42	15	22	10	6	<5	<373
<b>Total</b>	<b>&lt;3,229</b>	<b>2,471</b>	<b>&lt;1,770</b>	<b>&lt;679</b>	<b>673</b>	<b>213</b>	<b>78</b>	<b>&lt;177</b>	<b>9,221</b>

\*Included as Other in Figure 8

## IG DISPENSES BY MEDICAL CONDITION

The top 10 medical conditions account for about 87.7 per cent of all Ig supplied, with the top 3 medical conditions accounting for 54.9 per cent. Acquired hypogammaglobulinaemia — haematological malignancy and post haemopoietic stem cell transplantation (HSCT) is the medical condition for which the greatest percentage of Ig was dispensed in 2022-23 (23.6 per cent), closely followed by chronic inflammatory demyelinating polyneuropathy (CIDP) (21.7 per cent). Primary immunodeficiency diseases (PID) with antibody deficiency accounted for 9.5 per cent of total Ig use.

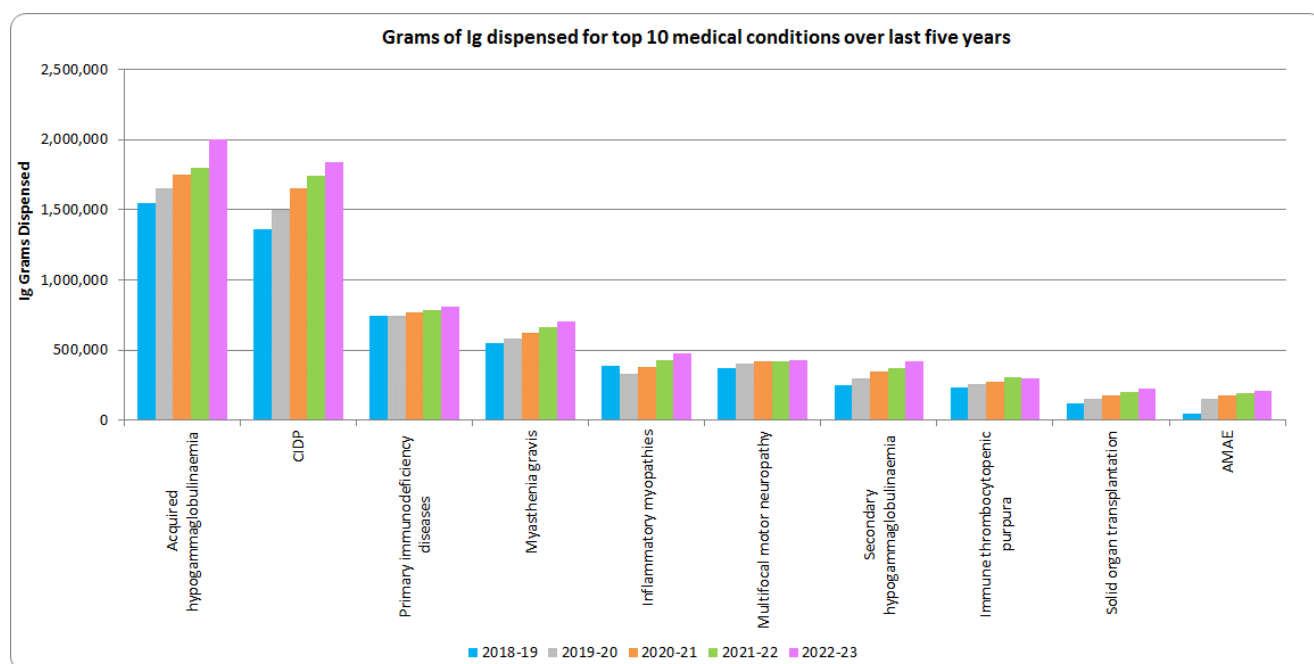


Figure 9: Grams of Ig dispensed by top 10 medical conditions

The top 10 medical conditions by state and territory for 2022-23 is presented in **Table 13**.

**Table 13: Grams dispensed by states and territories and medical condition for 2022-23**

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Acquired hypogammaglobulinaemia	593,349	446,675	583,354	153,426	121,075	73,197	5,591	26,310	2,002,977
CIDP	696,599	366,327	459,095	59,565	159,416	41,855	9,017	45,245	1,837,117
Primary immunodeficiency diseases	351,483	156,088	159,135	43,968	55,421	11,032	3,529	27,464	808,119
Myasthenia gravis	215,738	166,873	178,250	16,365	92,093	11,903	5,105	16,805	703,130
Inflammatory myopathies	132,070	112,043	104,713	39,705	69,510	5,408	2,683	12,935	479,065
Multifocal motor neuropathy	146,818	81,084	90,704	37,423	38,720	9,008	5,570	22,190	431,515
Secondary hypogammaglobulinaemia	154,245	85,864	128,758	11,175	24,808	10,493	594	7,440	423,377
Immune thrombocytopenic purpura	108,148	64,733	70,621	31,085	14,760	5,303	1,700	5,178	301,526
Solid organ transplantation	23,738	146,235	20,213	11,343	8,438	14,435	1,850	1,420	227,670
AMAЕ	101,313	33,868	47,000	2,720	15,288	2,243	1,570	8,170	212,170
<b>Total</b>	<b>2,523,497</b>	<b>1,659,787</b>	<b>1,841,841</b>	<b>406,774</b>	<b>599,528</b>	<b>184,874</b>	<b>37,208</b>	<b>173,156</b>	<b>7,426,665</b>

## Ig Dispenses - IVIg and SCIg

In March 2013, the Jurisdictional Blood Committee (JBC) approved the introduction of SCIg under the national blood arrangements. In 2022-23, the SCIg products supplied by the NBA are:

- Evogam 16% 0.8g/5ml and 3.2g/20ml supplied by CSL Behring (domestic)
- Hizentra 5% 1g/5ml, 2g/10ml, 4g/20ml and 10g/50ml supplied by CSL Behring (imported), and
- Cuvitru 1g/5ml, 2g/10ml, 4g/20ml and 8g/40ml supplied by Takeda Pharmaceuticals (Australia) Pty Ltd (imported).

In addition to the clinical and diagnostic criteria for access to Ig products, access to SCIg products is provided through an assurance framework for the appropriate use of the product. The first phase of implementation was through hospital-based management arrangements. Subcutaneous Ig access rules are detailed on the NBA website at <https://www.blood.gov.au/blood-products/immunoglobulin-products/subcutaneous-immunoglobulin-sci>. Participation in the National SCIg program requires hospitals to establish their capability and capacity to manage a hospital based SCIg program, where the hospital provides access to all resources and takes full accountability for the management and use of the product within defined governing requirements. Further work will be undertaken to support supply of SCIg for other pathways of care.

In 2022-23, the medical conditions that SCIg can be used to treat are:

- primary immunodeficiency diseases (PID)
- specific antibody deficiency
- acquired hypogammaglobulinaemia secondary to haematological malignancies, or post-haemopoietic stem cell transplantation (HSCT)
- secondary hypogammaglobulinaemia unrelated to haematological malignancies, or post-haemopoietic stem cell transplantation (HSCT), and
- chronic inflammatory demyelinating polyneuropathy (CIDP).

These products are authorised and distributed by Lifeblood in the same manner as IVIg. **Tables 14-15** show the patient numbers, grams dispensed, by medical condition and by IVIg and SCIg products in 2022-23. **Tables 16-17** show the patient numbers, grams dispensed, by medical condition and by state and territory in 2022-23.



Table 14: Patients dispensed by SCIg/ IVIg medical conditions and product for 2022-23

Medical Condition	IVIg								SCIg			Total
	Flebogamma 5%	Flebogamma 10%	Gamunex 10%	Intragam 10	Kiovig	Octagam 10%	Privigen 10%	Privigen AU	Cuvitru	Evogam	Hizentra	
Acquired-hypogammaglobulinaemia	37	52	98	4,923	-	868	1,075	3,073	235	41	631	<b>7,956</b>
Chronic inflammatory demyelinating polyneuropathy	90	160	59	1,393	54	123	2,350	115	50	<5	174	<b>3,152</b>
Primary immunodeficiency diseases	26	9	5	1,384	<5	19	97	1,002	137	229	607	<b>2,343</b>
Secondary hypogammaglobulinaemia	20	25	196	732	-	260	231	433	92	31	215	<b>1,717</b>
Specific antibody deficiency	5	<5	14	243	-	48	36	156	34	32	109	<b>486</b>

Note: Patient counts are distinct counts and will not sum for National or total rows and columns, as patients have transitioned to new products as part of CSL Behring roll out of new products and the refinement of the product allocation process. This process has increased the discrepancies between the distinct patient counts at product level and the totals in 2022-23.

Table 15: Grams dispensed by SCIg/IVIg medical conditions and product for 2022-23

Medical Condition	IVIg			SCIg		Total
	Imported IVIg	Intragam 10	Privigen AU	Imported SCIg	Evogam	
Acquired-hypogammaglobulinaemia	392,238	1,145,893	206,025	247,281	11,541	<b>2,002,977</b>
Chronic inflammatory demyelinating polyneuropathy	1,151,607	514,103	12,260	159,197	306	<b>1,837,472</b>
Primary immunodeficiency diseases	36,335	400,613	77,740	240,883	52,086	<b>807,657</b>
Secondary hypogammaglobulinaemia	130,388	171,013	28,940	85,650	7,387	<b>423,377</b>
Specific antibody deficiency	24,205	61,608	10,720	37,246	7,610	<b>141,388</b>

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Table 16: Patients dispensed by SCIg medical conditions, and state and territory for 2022-23

Products	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Acquired-hypogammaglobulinaemia	272	226	154	93	118	33	<5	12	<903
Chronic inflammatory demyelinating polyneuropathy	55	56	46	<5	50	7	<5	8	<229
Primary immunodeficiency diseases	359	215	190	72	71	12	<5	36	<949
Secondary hypogammaglobulinaemia	115	51	120	11	29	5	<5	<5	<340
Specific antibody deficiency	63	30	24	18	34	<5	<5	<5	<183
<b>Total</b>	<b>863</b>	<b>578</b>	<b>532</b>	<b>&lt;198</b>	<b>302</b>	<b>&lt;61</b>	<b>&lt;14</b>	<b>&lt;66</b>	<b>2,573</b>

Table 17: Grams dispensed by SCIg medical conditions, and state and territory for 2022-23

Products	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Acquired-hypogammaglobulinaemia	78,847	63,713	43,439	24,701	33,535	10,897	176	3,515	258,822
Chronic inflammatory demyelinating polyneuropathy	34,966	37,972	30,561	810	43,287	3,840	1,392	6,675	159,503
Primary immunodeficiency diseases	107,506	65,373	65,130	18,823	19,104	4,077	851	12,107	292,969
Secondary hypogammaglobulinaemia	32,192	11,199	36,708	3,475	7,078	1,221	64	1,100	93,037
Specific antibody deficiency	17,101	7,707	7,268	4,416	6,426	800	90	1,048	44,856
<b>Total</b>	<b>270,611</b>	<b>185,963</b>	<b>183,107</b>	<b>52,225</b>	<b>109,429</b>	<b>20,834</b>	<b>2,573</b>	<b>24,445</b>	<b>849,187</b>

# Ig Issued – NHlg

CSL Behring produces NHlg from hyperimmune plasma specially collected by Lifeblood. The volume of product is limited by the availability of this specialised plasma, and by production scheduling arrangements in CSL Behring’s manufacturing facility.

Demand for NHlg declined due to the introduction of SCIg and the implementation of the NHlg policy outlining the national position on access and use under the national blood arrangements. Normal human Ig may only be supplied for two purposes: (i) for the treatment of susceptible contacts of measles, hepatitis A, poliomyelitis and rubella (as directed by public health officials), or (ii) for the treatment of immunodeficiency conditions for which the product is indicated for patients for whom IVlg and SCIg are both contraindicated. Normal human Ig access rules are detailed on the NBA website at <https://www.blood.gov.au/NHlg>.

Figure 10 shows the issues for both purposes under the policy and the dispenses that relate to the second purpose under the policy (indicated immunodeficiency conditions).

Figure 10 shows the grams issued and dispensed, and the grams issued per 1,000 population.

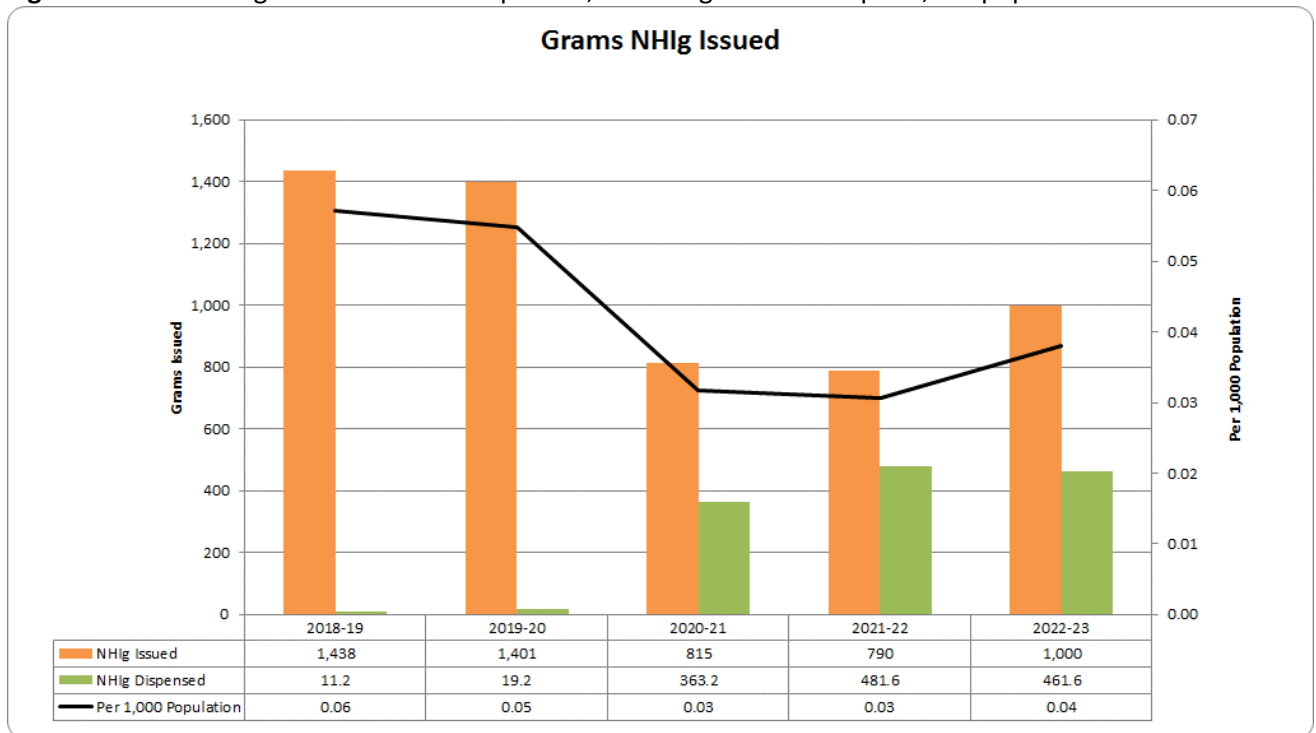


Figure 10: NHlg grams issued and dispensed and grams issued per 1,000 population

# Appendices

## APPENDIX A – BACKGROUND

### Funding for Ig

The Commonwealth funded 63 per cent of Ig supplied under the national blood arrangements, with the remaining 37 per cent funded by the state or territory to which the product is supplied.

### The Criteria

The *Criteria for the Clinical Use of Immunoglobulin in Australia* (the Criteria) is a publication that describes the eligibility criteria that patients must meet to receive Ig that is funded by all Australian governments. Product is provided free of charge to all patients who have a condition meeting qualifying criteria for supply as outlined in the Criteria. The Criteria helps to ensure that Ig is accessed consistently across Australia for the treatment of patients whose health is likely to be improved with Ig therapy. The Criteria was developed using the best available scientific evidence and medical expertise.

Version 3 of the Criteria was published in October 2018, replacing the *Criteria for the Clinical use of Intravenous Immunoglobulin in Australia – Second Edition* (v2) from August 2012. Eligibility criteria were updated to align with new evidence and best clinical practice, along with other improvements to aid prescribers. Version 3 also reflects earlier updated access arrangements for SCIg and NHIg.

### Supply of Product

Immunoglobulin is made from donated human plasma. In Australia, Lifeblood is contracted to collect plasma for fractionation, which is then supplied to CSL Behring, who is responsible for the manufacture of Australian plasma derived products. To supplement the supply of Australian Immunoglobulin, the NBA contracts additional suppliers to import Ig products to ensure demand can be met adequately.

There are 2 main ways Ig is available in Australia:

#### 1. Supply under national blood arrangements

If Ig is ordered to treat a medical condition which is funded under the Criteria, then the product is supplied and funded under national blood arrangements. In this case the cost of the product is shared between the Commonwealth and the relevant state or territory.

Orders for Ig under national blood arrangements are made to Lifeblood, which is contracted by the NBA as the authoriser and distributor of all Ig funded under these arrangements. In seeking authorisation through BloodSTAR, the requesting clinician will be asked to provide information to establish that the request in BloodSTAR meets the Criteria. For ongoing conditions, the Criteria may specify review criteria to be applied in reviewing the patient to determine whether access to funded Ig will continue.

In its role as authoriser of requests for Ig, Lifeblood previously maintained a database of requests, and provides data to the NBA for use as a basis for reporting on the annual use of Ig in Australia, known as STARS data. BloodSTAR now holds these data for all states and territories.

#### 2. Direct order and other supply arrangements

For several reasons, medical specialists may sometimes want to prescribe Ig for medical conditions that are not funded under the national blood arrangements as defined in the Criteria. In such cases, IVIg or SCIg may be available either through Direct Order arrangements, or directly from suppliers on a commercial basis, at private expense.

Under Direct Order arrangements, AHPs can purchase imported product only (IVIg or SCIg) directly from the supplier at an equivalent price to that negotiated by the NBA.

Every state or territory health department is responsible for advising each supplier of imported IVIg and SCIg product of the AHPs in their state or territory. Processes vary, with some states or territories confirming AHP status to the supplier each time a JDO is requested, and others having longer-standing arrangements.

Application and approval arrangements for doctors seeking access to imported Ig products raised through a Direct Order vary between hospitals and states and territories, but usually involve seeking access through the local hospital therapeutics or Ig committee, or equivalent. Where approval is granted, the cost of the imported Ig product purchased through a Direct Order is usually borne directly by the AHP.

### 2022-23 Activities

The NBA Ig Governance Program continued its work throughout **2022-23** to improve the governance and management of publicly funded Ig. This program aims to ensure that:

- Ig product use and management reflects appropriate clinical practice and represents efficient, effective, and ethical expenditure of government funds, in accordance with relevant national safety and quality standards for health care,
- access to Ig products is consistent with the Criteria for access determined by governments, and
- capture of information on the need for, use of, and outcomes of treatment (including adverse events) with Ig products is improved, to better inform future changes to the Criteria.

In 2022-23 the Ig Governance Program continued to:

- Implement and promote the *National Policy: Access to Government-funded Immunoglobulin Products in Australia*, which defines the role and responsibilities of all professionals involved in the prescription, management and use of Ig,
- oversee the digital Ig management system BloodSTAR, which facilitates clinical requests for patient access to Ig products,
- advise and support clinical staff by reporting on Ig usage and responding to enquiries relating to access to Ig,
- and
- monitor and improve access to Ig, including reviewing and refining the *Criteria for the Clinical Use of Immunoglobulin in Australia* (the Criteria), which defines eligibility for access to Ig based on expert clinical assessment and advice, in 2022–23 the Specialist Working Groups (SWGs) considered the Ig use and evidence for the following conditions:
  - primary immunodeficiency disease – common variable immunodeficiency and severe combined immunodeficiency
  - secondary hypogammaglobulinaemia – chronic disseminated enterovirus infection
  - vaccine-induced immune thrombotic thrombocytopenia (VITT)
  - vaccine-associated myocarditis and pericarditis
  - allogeneic haemopoietic stem cell transplant
  - haemolytic disease of the newborn
  - heparin-induced thrombocytopenia
  - solid organ transplantation
  - Guillain-Barré syndrome
  - chronic inflammatory demyelinating polyneuropathy (CIDP)
  - inflammatory myopathies.

The NBA conducted a review of the National Subcutaneous Immunoglobulin (SCIg) Program with the aim of identifying options to overcome barriers to program uptake and inform the future direction of the program. The NBA is currently considering recommendations from the report provided by HealthConsult, the consultant engaged to undertake the review. The NBA continued to harness

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opportunities for increasing knowledge of Ig use and management. The NBA provided guidance and advice to support the completion of the NPS Medicinewise Value in Prescribing (ViP) Program. The program developed in total 18 resources about Ig use to support clinicians, dispensers and consumers, including 4 videos and 14 downloadable resources. These resources are available on the NBA website <https://www.blood.gov.au/immunoglobulin-videos-clinicians-and-patients>. NIGAC provided expert advice as the steering committee for the ViP initiative.

The NBA will continue to explore further opportunities to support the efficient, effective, ethical and most appropriate use of this precious resource and enable continued patient access to Ig therapy under national funding arrangements.

For further information on the Ig Governance Program go to the NBA website at <https://www.blood.gov.au/ig-program>.

During 2022-23 the transition of some of Australia's plasma products commenced. This is a planned change as a result of CSL Behring expanding its manufacturing facility to support the processing of Australia's growing plasma collections into plasma products. As part of this expansion CSL Behring is changing how it manufactures these products to be in line with its global manufacturing processes. As a result, 5 of Australia's plasma products are changing between calendar years 2023 and 2024. The transition of the first 2 products under this process started in 2022–23 and involved albumin 20 per cent (Albumex 20 to Alburex 20 AU) and intravenous Ig 10 per cent (Intragam 10 to Privigen AU).

## APPENDIX B – ACRONYMS AND GLOSSARY

## Acronyms

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHP	Australian Health Provider
AHPRA	Australian Health Practitioner Regulation Agency
AMAE	Autoimmune encephalitis mediated by antibodies targeting cell-surface antigens
ANZSBT	Australia and New Zealand Society of Blood Transfusion
BloodNet	The national online ordering and inventory management system
BloodSTAR	Blood System for Tracking Authorisations and Reviews
HSCT	Hematopoietic stem cell transplantation
IDMS	Integrated Data Management System
Ig	Immunoglobulin products including IVIg and SCIg
IVIg	Intravenous immunoglobulin
JBC	Jurisdictional Blood Committee
NaFAA	National Fractionation Agreement for Australia
NBA	National Blood Authority
NHIg	Normal human immunoglobulin
NIGAC	National Immunoglobulin Governance Advisory Committee
NSQHS	National Safety and Quality Health Service
NSW	New South Wales
NT	Northern Territory
PID	Primary Immunodeficiency Diseases
QLD	Queensland
SA	South Australia
SCIg	Subcutaneous Immunoglobulin
STARS	Supply Tracking Analysis Recording System
SWG	Specialist Working Group
TAS	Tasmania
VIC	Victoria
WA	Western Australia



## Glossary of terms

Term	Description
<b>Blood products</b>	Products manufactured from human blood
<b>Lifeblood</b>	The Australian Red Cross Lifeblood
<b>Condition</b>	<p>Clinical conditions are categorised according to the quality of the available evidence and whether immunoglobulin treatment is considered beneficial</p> <p>Specific conditions (previously known as primary diagnosis) within a medical condition (previously known as disease category). In some instances, the medical condition may be the same as the specific condition, for example – Myasthenia gravis is the specific condition and the medical condition</p>
<b><i>Criteria for the clinical use of immunoglobulin in Australia (the Criteria)</i></b>	A document describing the conditions, indications and patient qualifying and review criteria for which Ig is funded under national blood arrangements by all Australian governments
<b>Direct Orders</b>	Previously known as Jurisdictional Direct Orders. Arrangements implemented by the NBA with suppliers to facilitate the purchase of Ig for the treatment of conditions not satisfying the <i>Criteria for the clinical use of Ig in Australia</i>
<b>Fractionation</b>	A manufacturing process that separates blood plasma into specific protein fractions
<b>Imprest stock</b>	Health provider orders of product for stock, that is maintained at a certain level and held at their site
<b>Intravenous immunoglobulin</b>	An immunoglobulin product derived from donated human plasma, that is administered intravenously
<b>Jurisdiction</b>	Any of the parties to the Australian National Blood Agreement, being the Australian Government and all state and territory governments
<b>Minimum Product Inventory</b>	The minimum inventory of Ig held by CSL Behring to meet contract obligations
<b>National Blood Agreement</b>	The Agreement signed by all governments in 2003, that sets out the objectives for governments for the management of the Australian blood sector
<b>National blood arrangements</b>	Arrangements, including funding arrangements, established under the National Blood Agreement
<b>National CSL Reserve</b>	The reserve of inventory of Ig that CSL Behring manages on behalf of the NBA for contingency purposes
<b>Normal human immunoglobulin</b>	An Ig product derived from human plasma that is administered by intramuscular injection (as opposed to intravenous or sub-cutaneous injection)
<b>Plasma</b>	The liquid part of the blood containing antibodies and other proteins
<b>Speciality</b>	Classification of the conditions according to the clinical speciality, previously discipline

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Term	Description
<b>Subcutaneous immunoglobulin</b>	An Ig product derived from donated human plasma that is administered subcutaneously
<b>Treatment episode or Dispense Event</b>	One instance or episode of a treatment plan, for example a treatment plan may be made up of 4 episodes over 4 months with an episode occurring every 4 weeks (4 treatment episodes) OR one dose of transfused product every 2 weeks for 6 months would be 13 treatment episodes or dispense event

## APPENDIX C – VERSION 3 CONDITIONS BY SPECIALITY

Specific Condition	Medical Condition	Speciality	Category
Acquired bleeding disorder, other coagulation factors (Prothrombin, factor V, factor VII, factor X, factor XI, and factor XIII)	Coagulation factor inhibitors	Haematology	Has application in exceptional circumstances only
Acquired haemophilia A	Coagulation factor inhibitors	Haematology	Has application in exceptional circumstances only
Acquired von Willebrand syndrome	Coagulation factor inhibitors	Haematology	Has application in exceptional circumstances only
Acute leukaemia	Acquired-hypogammaglobulinaemia — haematological malignancy or post HSCT	Haematology	Has an established therapeutic role
Anti-neutrophil cytoplasmic antibody (ANCA) (PR3 or MPO)-positive idiopathic rapidly progressive glomerulonephritis	Anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis	Immunology	Has application in exceptional circumstances only
Ataxic sensory neuropathy	Sjögren's syndrome	Neurology	Has application in exceptional circumstances only
Atypical rolandic epilepsy	Childhood epileptic encephalopathy	Neurology	Has application in exceptional circumstances only
Autoimmune haemolytic anaemia	Autoimmune haemolytic anaemia (AIHA)	Haematology	Has an emerging therapeutic role
Autoimmune neutropenia	Autoimmune neutropenia	Haematology	Has application in exceptional circumstances only
Autoimmune retinopathy	Autoimmune retinopathy (AIR)	Immunology	Has application in exceptional circumstances only
Autonomic neuropathy	Sjögren's syndrome	Neurology	Has application in exceptional circumstances only
Bullous Pemphigoid	Bullous pemphigoid	Immunology	Has an emerging therapeutic role
Catastrophic anti-phospholipid syndrome	Catastrophic anti-phospholipid syndrome (CAPS)	Immunology	Has application in exceptional circumstances only
Chronic Immune thrombocytopenic purpura (ITP)	Immune thrombocytopenic purpura (ITP) — adult	Haematology	Has an established therapeutic role
Chronic inflammatory demyelinating polyneuropathy (CIDP)	Chronic inflammatory demyelinating polyneuropathy (CIDP)	Neurology	Has an established therapeutic role
Chronic lymphocytic leukaemia (CLL)	Acquired-hypogammaglobulinaemia — haematological malignancy or post HSCT	Haematology	Has an established therapeutic role

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Specific Condition	Medical Condition	Speciality	Category
Cicatrical pemphigoid (CP)	Cicatrical pemphigoid (CP) or Mucous Membrane Pemphigoid (MMP)	Dermatology	Has an emerging therapeutic role
Combined immunodeficiency generally less profound than SCID (e.g. thymoma)	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Combined immunodeficiency with associated or syndromal features (e.g. Wiskott Aldrich syndrome; ataxia telangiectasia)	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Confirmed autoimmune congenital heart block in a fetus	Autoimmune congenital heart block	Immunology	Has application in exceptional circumstances only
Congenital haemophilia A with acquired factor VIII inhibitor	Coagulation factor inhibitors	Haematology	Has application in exceptional circumstances only
Dermatomyositis (DM)	Inflammatory myopathies: polymyositis, dermatomyositis and necrotising autoimmune myopathy	Neurology	Has an established therapeutic role
Diabetic amyotrophy	Diabetic amyotrophy	Neurology	Use is not supported
Drug-induced pemphigus foliaceus	Pemphigus foliaceus (PF)	Immunology	Has an emerging therapeutic role
Encephalitis associated with antibodies to AMPA receptor	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Encephalitis associated with antibodies to CASPR2	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Encephalitis associated with antibodies to DPPX	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Encephalitis associated with antibodies to GABA (A or B) receptor	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Encephalitis associated with antibodies to glycine receptor	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Encephalitis associated with antibodies to LGI1	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Encephalitis associated with antibodies to NMDA receptor	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Encephalitis associated with antibodies to VGKC	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Endemic pemphigus foliaceus	Pemphigus foliaceus (PF)	Immunology	Has an emerging therapeutic role
Eosinophilic granulomatosis with polyangiitis (Churg-Strauss Syndrome)	Anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis	Immunology	Has application in exceptional circumstances only
Epidermolysis bullosa acquisita	Epidermolysis bullosa acquisita	Immunology	Has application in exceptional circumstances only

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Specific Condition	Medical Condition	Speciality	Category
Evans syndrome - with significant Immune thrombocytopenic purpura (ITP) - adult	Immune thrombocytopenic purpura (ITP) — adult	Haematology	Has an established therapeutic role
Evans syndrome child - with significant ITP	Immune thrombocytopenic purpura (ITP) — in children 15 years and younger	Haematology	Has an emerging therapeutic role
Evans Syndrome with significant AIHA	Autoimmune haemolytic anaemia (AIHA)	Haematology	Has an emerging therapeutic role
Existing patient - authorisation for IgG subclass deficiency	Specific antibody deficiency (SAD)	Immunology	Has an emerging therapeutic role
Fetal alloimmune thrombocytopenia (FAIT)	Fetal and neonatal alloimmune thrombocytopenia (FNAIT)	Haematology	Has an established therapeutic role
Granulomatosis with polyangiitis (Wegener Granulomatosis)	Anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis	Immunology	Has application in exceptional circumstances only
Graves ophthalmopathy	Graves ophthalmopathy (GO)	Immunology	Has application in exceptional circumstances only
Guillain–Barré Syndrome (GBS)	Guillain–Barré Syndrome (GBS)	Neurology	Has an established therapeutic role
Guillain–Barré Syndrome (GBS) variants	Guillain–Barré Syndrome (GBS)	Neurology	Has an established therapeutic role
Haemolytic disease of the fetus	Haemolytic disease of the fetus (HDF)	Haematology	Has application in exceptional circumstances only
Haemophagocytic lymphohistiocytosis	Haemophagocytic lymphohistiocytosis	Haematology	Has an emerging therapeutic role
Heart and kidney transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Heart and lung transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Heart transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Hyperhaemolysis syndrome	Hyperhaemolysis syndrome	Haematology	Has application in exceptional circumstances only
Hypogammaglobulinaemia following B cell depletion therapy	Secondary hypogammaglobulinaemia (including iatrogenic immunodeficiency)	Immunology	Has an emerging therapeutic role
Hypogammaglobulinaemia following Solid organ transplantation	Secondary hypogammaglobulinaemia (including iatrogenic immunodeficiency)	Immunology	Has an emerging therapeutic role
Idiopathic opsoclonus-myooclonus ataxia	Opsoclonus-myooclonus ataxia (OMA)	Neurology	Has an emerging therapeutic role
IgA paraproteinaemic demyelinating neuropathy	Chronic inflammatory demyelinating polyneuropathy (CIDP)	Neurology	Has an established therapeutic role
IgA pemphigus foliaceus	Pemphigus foliaceus (PF)	Immunology	Has an emerging therapeutic role

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Specific Condition	Medical Condition	Speciality	Category
IgG paraproteinaemic demyelinating neuropathy	Chronic inflammatory demyelinating polyneuropathy (CIDP)	Neurology	Has an established therapeutic role
IgM paraproteinaemic demyelinating neuropathy	IgM paraproteinaemic demyelinating neuropathy	Neurology	Has an emerging therapeutic role
Inclusion Body Myositis (IBM)	Inclusion Body Myositis (IBM)	Neurology	Has an established therapeutic role
ITP - child - chronic	Immune thrombocytopenic purpura (ITP) — in children 15 years and younger	Haematology	Has an emerging therapeutic role
ITP - child - newly diagnosed	Immune thrombocytopenic purpura (ITP) — in children 15 years and younger	Haematology	Has an emerging therapeutic role
ITP - child - persistent	Immune thrombocytopenic purpura (ITP) — in children 15 years and younger	Haematology	Has an emerging therapeutic role
Kawasaki disease	Kawasaki disease	Immunology	Has an established therapeutic role
Kidney transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Lambert–Eaton myasthenic syndrome	Lambert–Eaton myasthenic syndrome (LEMS)	Neurology	Has an established therapeutic role
Landau Kleffner syndrome	Childhood epileptic encephalopathy	Neurology	Has application in exceptional circumstances only
Lennox-Gastaut syndrome	Childhood epileptic encephalopathy	Neurology	Has application in exceptional circumstances only
LETMs	Neuromyelitis optica spectrum disorders (NMOSD)	Neurology	Has application in exceptional circumstances only
Liver and kidney transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Liver transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Lung transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Lymphoproliferative syndromes (e.g. XLP1, XLP2, CD27 def)	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Macrophage activation syndrome	Haemophagocytic lymphohistiocytosis	Haematology	Has an emerging therapeutic role
Memory B cell deficiency secondary to haemopoietic stem cell transplantation (HSCT)	Acquired-hypogammaglobulinaemia — haematological malignancy or post HSCT	Haematology	Has an established therapeutic role
Microscopic polyangiitis	Anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis	Immunology	Has application in exceptional circumstances only

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Specific Condition	Medical Condition	Speciality	Category
Monophasic acute disseminated encephalomyelitis (ADEM)	Acute disseminated encephalomyelitis (ADEM)	Neurology	Has an emerging therapeutic role
Mucous Membrane Pemphigoid (MMP)	Cicatricial pemphigoid (CP) or Mucous Membrane Pemphigoid (MMP)	Dermatology	Has an emerging therapeutic role
Multifocal motor neuropathy with or without persistent conduction block	Multifocal motor neuropathy (MMN)	Neurology	Has an established therapeutic role
Multiphasic acute disseminated encephalomyelitis (ADEM)	Acute disseminated encephalomyelitis (ADEM)	Neurology	Has an emerging therapeutic role
Multiple myeloma (MM)	Acquired-hypogammaglobulinaemia — haematological malignancy or post HSCT	Haematology	Has an established therapeutic role
Myasthenia gravis (MG)	Myasthenia gravis (MG)	Neurology	Has an established therapeutic role
Myocarditis in children	Myocarditis in children	Immunology	Use is not supported
Necrotising autoimmune myopathy (NAM)	Inflammatory myopathies: polymyositis, dermatomyositis and necrotising autoimmune myopathy	Neurology	Has an established therapeutic role
Neonatal alloimmune thrombocytopenia (NAIT)	Fetal and neonatal alloimmune thrombocytopenia (FNAIT)	Haematology	Has an established therapeutic role
Neonate with haemochromatosis	Neonatal haemochromatosis (NH)	Haematology	Has an established therapeutic role
Newly Diagnosed Immune thrombocytopenic purpura (ITP)	Immune thrombocytopenic purpura (ITP) — adult	Haematology	Has an established therapeutic role
NMOSD–AQP4 ab positive	Neuromyelitis optica spectrum disorders (NMOSD)	Neurology	Has application in exceptional circumstances only
NMOSD–MOG ab positive	Neuromyelitis optica spectrum disorders (NMOSD)	Neurology	Has application in exceptional circumstances only
NMOSD–seronegative	Neuromyelitis optica spectrum disorders (NMOSD)	Neurology	Has application in exceptional circumstances only
Non-Hodgkin lymphoma (NHL)	Acquired-hypogammaglobulinaemia — haematological malignancy or post HSCT	Haematology	Has an established therapeutic role
Other Haematological malignancy	Acquired-hypogammaglobulinaemia — haematological malignancy or post HSCT	Haematology	Has an established therapeutic role
Other Hypogammaglobulinaemia unrelated to haematological malignancies or haemopoietic stem cell transplantation (HSCT)	Secondary hypogammaglobulinaemia (including iatrogenic immunodeficiency)	Immunology	Has an emerging therapeutic role
Other transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role

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Specific Condition	Medical Condition	Speciality	Category
Paediatric acute neuropsychiatric disorders (PANS)	PANDAS/PANS	Neurology	Has application in exceptional circumstances only
Paediatric autoimmune neuropsychiatric disorder (PANDAS)	PANDAS/PANS	Neurology	Has application in exceptional circumstances only
Painful small fibre neuropathy	Sjögren's syndrome	Neurology	Has application in exceptional circumstances only
Pancreas and kidney transplant	Solid organ transplantation	Transplant Medicine	Has an emerging therapeutic role
Paraneoplastic associated breast cancer	Opsoclonus-myoclonus ataxia (OMA)	Neurology	Has an emerging therapeutic role
Paraneoplastic associated neuroblastoma	Opsoclonus-myoclonus ataxia (OMA)	Neurology	Has an emerging therapeutic role
Paraneoplastic associated other tumour type	Opsoclonus-myoclonus ataxia (OMA)	Neurology	Has an emerging therapeutic role
Paraneoplastic associated small cell lung cancer	Opsoclonus-myoclonus ataxia (OMA)	Neurology	Has an emerging therapeutic role
Pemphigus erythematosus	Pemphigus foliaceus (PF)	Immunology	Has an emerging therapeutic role
Pemphigus herpetiformis	Pemphigus foliaceus (PF)	Immunology	Has an emerging therapeutic role
Pemphigus vulgaris	Pemphigus vulgaris (PV)	Dermatology	Has an emerging therapeutic role
Persistent Immune thrombocytopenic purpura (ITP)	Immune thrombocytopenic purpura (ITP) — adult	Haematology	Has an established therapeutic role
Polymyositis (PM)	Inflammatory myopathies: polymyositis, dermatomyositis and necrotising autoimmune myopathy	Neurology	Has an established therapeutic role
Polyneuropathy of critical illness	Polyneuropathy of critical illness	Immunology	Use is not supported
Possible Common variable immune deficiency (CVID) - below normal serum IgG but normal serum IgA level	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Pregnant woman with previous fetal loss	Neonatal haemochromatosis (NH)	Haematology	Has an established therapeutic role
Pure red cell aplasia – associated B19 infection	Pure red cell aplasia (PRCA)	Haematology	Has application in exceptional circumstances only
Pure red cell aplasia – autoimmune mediated	Pure red cell aplasia (PRCA)	Haematology	Has application in exceptional circumstances only
Pyoderma Gangrenosum	Pyoderma Gangrenosum (PG)	Immunology	Has application in exceptional circumstances only
Rasmussen encephalitis	Rasmussen encephalitis	Neurology	Has application in exceptional circumstances only
Recurrent acute disseminated encephalomyelitis (ADEM)	Acute disseminated encephalomyelitis (ADEM)	Neurology	Has an emerging therapeutic role



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Specific Condition	Medical Condition	Speciality	Category
Relapsing remitting multiple sclerosis	Multiple sclerosis (MS – RMMS)	Neurology	Has application in exceptional circumstances only
Risk of autoimmune congenital heart block – previously affected sibling	Autoimmune congenital heart block	Immunology	Has application in exceptional circumstances only
Scleromyxedema – skin and systemic disease	Scleromyxedema	Immunology	Has application in exceptional circumstances only
Scleromyxedema – skin involvement only	Scleromyxedema	Immunology	Has application in exceptional circumstances only
Sensorimotor axonal neuropathy	Sjögren’s syndrome	Neurology	Has application in exceptional circumstances only
Sepsis	Sepsis	Immunology	Use is not supported
Sero-negative autoimmune encephalitis	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Sero-negative limbic encephalitis	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Severe combined immunodeficiency (SCID)	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Severe reduction in all Ig isotypes with decreased or absent B-cells (e.g. XLA def)	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Severe reduction in at least two Ig isotypes with low/normal B-cells (e.g. CVID)	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Severe reduction in serum IgG and IgA with normal/elevated IgM (e.g. CD40L def)	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Specific antibody deficiency	Specific antibody deficiency (SAD)	Immunology	Has an emerging therapeutic role
Staphylococcal TSS	Toxic shock syndrome	Immunology	Has an emerging therapeutic role
Stevens–Johnson syndrome / toxic epidermal necrolysis overlap (SJS/TEN)	Toxic epidermal necrolysis / Stevens–Johnson syndrome	Immunology	Has an emerging therapeutic role
Stiff person syndrome	Stiff person syndrome	Neurology	Has an established therapeutic role
Streptococcal TSS	Toxic shock syndrome	Immunology	Has an emerging therapeutic role
Susac syndrome	Susac syndrome	Neurology	Has application in exceptional circumstances only
Suspected autoimmune encephalitis	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Suspected autoimmune limbic encephalitis	Antibody mediated autoimmune encephalitis (AMAE)	Neurology	Has an emerging therapeutic role
Systemic capillary leak syndrome	Systemic Capillary leak syndrome	Immunology	Has application in exceptional circumstances only

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Specific Condition	Medical Condition	Speciality	Category
Thymoma-associated hypogammaglobulinaemia (Goods Syndrome)	Secondary hypogammaglobulinaemia (including iatrogenic immunodeficiency)	Immunology	Has an emerging therapeutic role
Toxic epidermal necrolysis (TEN)	Toxic epidermal necrolysis / Stevens–Johnson syndrome	Immunology	Has an emerging therapeutic role
Transient hypogammaglobulinaemia of infancy	Primary immunodeficiency diseases (PID)	Immunology	Has an established therapeutic role
Vaccine induced immune thrombotic thrombocytopenia (VITT)	Vaccine induced immune thrombotic thrombocytopenia (VITT)	Haematology	Has application in exceptional circumstances only
West syndrome	Childhood epileptic encephalopathy	Neurology	Has application in exceptional circumstances only

## APPENDIX D – DATASET OF IG SUPPLY BY STATE/TERRITORY 2022-23

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
<b>Has an established therapeutic role</b>										
Acute leukaemia	Patients	169	146	72	43	26	11	<5	7	<467
	Average Age	42	39	47	47	27	58	36	35	42
	Average Weight	71	66	68	83	50	75	95	60	69
	Grams	18,953	16,784	10,535	6,873	2,769	988	773	943	58,618
	Grams/Episode	22	17	19	19	12	11	37	19	19
	Grams per 1,000 Population	2	3	2	2	2	2	3	2	2
Chronic Immune thrombocytopenic purpura (ITP)	Patients	197	113	106	47	32	8	<5	7	<513
	Average Age	60	66	63	60	62	48	55	55	62
	Average Weight	82	80	82	76	78	96	84	86	82
	Grams	37,481	19,186	22,623	7,667	3,523	943	235	1,375	93,031
	Grams/Episode	52	52	33	58	46	30	78	76	46
	Grams per 1,000 Population	5	3	4	3	2	2	1	3	4
Chronic inflammatory demyelinating polyneuropathy (CIDP)	Patients	1,247	600	805	121	213	75	20	72	3,086
	Average Age	65	64	62	61	62	64	50	60	64
	Average Weight	83	84	85	83	82	87	93	88	84
	Grams	686,324	362,354	444,485	57,780	158,464	40,435	8,732	44,555	1,803,127
	Grams/Episode	44	43	30	43	48	28	54	54	39
	Grams per 1,000 Population	85	55	84	21	88	71	35	98	70
Chronic lymphocytic leukaemia (CLL)	Patients	616	431	459	141	143	64	5	26	1,858
	Average Age	74	74	74	71	73	74	67	73	74
	Average Weight	78	79	79	81	76	79	89	78	79
	Grams	160,213	114,015	137,799	36,366	34,431	20,568	1,925	7,619	512,933
	Grams/Episode	26	24	23	21	18	19	34	28	24
	Grams per 1,000 Population	20	17	26	13	19	36	8	17	20
Combined immunodeficiency generally less profound than SCID (e.g. thymoma)	Patients	19	18	11	<5	5		<5		<60
	Average Age	51	32	32	16	52		9		40
	Average Weight	66	49	71	44	89		22		65

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Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	5,299	2,982	3,330	435	2,021		160		14,226
	Grams/Episode	20	17	18	17	20		10		19
	Grams per 1,000 Population	1	0	1	0	1		1		1
Combined immunodeficiency with associated or syndromal features (e.g. Wiskott Aldrich syndrome; ataxia telangiectasia)	Patients	13	9	15	<5	8		<5	<5	<59
	Average Age	19	27	20	7	16		16	51	19
	Average Weight	48	58	48	26	40		37	44	45
	Grams	3,308	2,398	2,895	301	1,740		305	248	11,193
	Grams/Episode	16	19	18	3	12		14	18	14
	Grams per 1,000 Population	0	0	1	0	1		1	1	0
Dermatomyositis (DM)	Patients	109	80	75	27	43	<5	<5	12	<350
	Average Age	54	48	51	50	53	40	62	50	51
	Average Weight	73	74	74	85	77	58	70	68	75
	Grams	40,318	34,675	30,550	12,990	27,768	1,088	385	4,475	152,248
	Grams/Episode	36	49	22	44	39	19	32	45	35
	Grams per 1,000 Population	5	5	6	5	15	2	2	10	6
Evans syndrome - with significant Immune thrombocytopenic purpura (ITP) - adult	Patients	<5	5	<5	<5	<5			<5	<30
	Average Age	60	35	38	52	29			64	41
	Average Weight	95	66	93	125	52			72	89
	Grams	610	880	1,295	350	105			290	3,530
	Grams/Episode	61	68	21	58	35			97	36
	Grams per 1,000 Population	0	0	0	0	0			1	0
Fetal alloimmune thrombocytopenia (FAIT)	Patients	<5	<5	<5	<5	<5				<25
	Average Age	32	34	32	29	33				32
	Average Weight	66	66	70	121	74				77
	Grams	2,570	1,935	2,975	2,773	1,463				11,715
	Grams/Episode	71	44	40	82	70				56
	Grams per 1,000 Population	0	0	1	1	1				0
Guillain–Barré Syndrome (GBS)	Patients	231	158	139	44	60	11	7	20	670
	Average Age	54	54	54	56	51	55	39	53	54
	Average Weight	82	75	82	82	80	93	74	81	81

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	36,720	22,945	22,510	6,468	9,198	1,458	1,083	3,325	103,705
	Grams/Episode	34	40	23	35	30	17	37	63	32
	Grams per 1,000	5	3	4	2	5	3	4	7	4
Guillain–Barré Syndrome (GBS) variants	Patients	101	89	55	12	16	6	<5	10	<293
	Average Age	55	54	57	58	60	57	57	56	56
	Average Weight	82	75	83	73	78	85	82	72	80
	Grams	15,728	12,235	8,825	1,503	2,355	1,020	635	1,533	43,833
	Grams/Episode	36	38	25	32	31	36	33	85	34
	Grams per 1,000 Population	2	2	2	1	1	2	3	3	2
IgA paraproteinaemic demyelinating neuropathy	Patients	6	<5	9						<20
	Average Age	77	77	70						73
	Average Weight	88	72	91						89
	Grams	3,030	955	8,590						12,575
	Grams/Episode	40	37	37						38
	Grams per 1,000 Population	0	0	2						0
IgG paraproteinaemic demyelinating neuropathy	Patients	19	8	13	5	<5	<5	<5	<5	<59
	Average Age	78	74	73	73	64	85	56	72	75
	Average Weight	76	80	83	80	75	95	75	79	80
	Grams	7,245	3,018	6,020	1,785	953	1,420	285	690	21,415
	Grams/Episode	33	37	36	39	23	36	48	24	34
	Grams per 1,000 Population	1	0	1	1	1	2	1	2	1
Inclusion Body Myositis (IBM)	Patients	36	44	38	9	<5	<5		8	<142
	Average Age	74	74	73	77	73	76		73	74
	Average Weight	82	79	80	72	72	61		76	79
	Grams	14,123	22,033	15,763	4,250	720	625		3,155	60,668
	Grams/Episode	36	44	25	36	25	25		35	34
	Grams per 1,000 Population	2	3	3	2	0	1		7	2
Kawasaki disease	Patients	166	186	88	36	42	12	7	9	545
	Average Age	6	4	4	5	5	3	6	2	5
	Average Weight	21	19	20	20	22	17	22	17	20

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	7,253	8,615	4,540	1,490	1,885	398	515	360	25,055
	Grams/Episode	31	33	18	23	35	16	37	33	27
	Grams per 1,000 Population	1	1	1	1	1	1	2	1	1
Lambert–Eaton myasthenic syndrome	Patients	11	5	10	<5				<5	<36
	Average Age	67	69	59	64				78	64
	Average Weight	68	84	71	87				64	73
	Grams	4,465	3,758	4,843	1,880				780	15,725
	Grams/Episode	35	53	23	44				60	34
	Grams per 1,000 Population	1	1	1	1				2	1
Lymphoproliferative syndromes (e.g. XLP1, XLP2, CD27 def)	Patients	<5	<5		<5	<5	<5			<25
	Average Age	38	31		19	15	46			32
	Average Weight	70	82		55	50	77			69
	Grams	955	384		150	48	336			1,873
	Grams/Episode	25	15		13	3	24			18
	Grams per 1,000 Population	0	0		0	0	1			0
Memory B cell deficiency secondary to haemopoietic stem cell transplantation (HSCT)	Patients	139	75	111	32	19	16	<5	6	<396
	Average Age	54	50	58	55	54	55	69	49	55
	Average Weight	76	73	73	76	67	77	76	62	74
	Grams	25,314	16,002	28,694	6,882	3,267	3,997	60	1,241	85,455
	Grams/Episode	22	20	20	18	21	29	30	21	21
	Grams per 1,000 Population	3	2	5	2	2	7	0	3	3
Multifocal motor neuropathy with or without persistent conduction block	Patients	205	112	138	40	49	16	7	20	569
	Average Age	59	59	59	61	63	69	53	57	60
	Average Weight	80	82	82	89	82	83	74	89	82
	Grams	146,818	81,084	90,704	37,423	38,720	9,008	5,570	22,190	431,515
	Grams/Episode	51	50	27	55	47	25	76	71	43
	Grams per 1,000 Population	18	12	17	14	21	16	22	49	17
Multiple myeloma (MM)	Patients	738	592	566	190	143	57	<5	25	<230
	Average Age	71	68	71	70	70	70	62	71	70
	Average Weight	78	80	80	82	78	82	80	75	79

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	178,734	141,825	159,531	48,509	33,535	17,583	205	6,040	585,961
	Grams/Episode	26	22	24	20	17	21	26	25	23
	Grams per 1,000 Population	22	22	30	18	19	31	1	13	23
Myasthenia gravis (MG)	Patients	495	357	374	54	149	30	7	40	1,477
	Average Age	64	63	63	64	63	64	46	63	63
	Average Weight	81	82	83	85	81	81	89	84	82
	Grams	215,738	166,873	178,250	16,365	92,093	11,903	5,105	16,805	703,130
	Grams/Episode	38	40	24	38	37	25	55	40	33
	Grams per 1,000 Population	27	25	34	6	51	21	20	37	27
Necrotising autoimmune myopathy (NAM)	Patients	80	65	79	32	48	6	6	5	319
	Average Age	66	64	64	68	60	46	43	54	64
	Average Weight	78	77	83	77	83	97	78	65	81
	Grams	32,028	32,780	32,623	16,178	25,923	3,405	2,158	1,810	146,903
	Grams/Episode	37	50	22	45	42	33	55	50	35
	Grams per 1,000 Population	4	5	6	6	14	6	9	4	6
Neonatal alloimmune thrombocytopenia (NAIT)	Patients	9	7	6	<5	<5		<5	<5	<42
	Average Age	25	6	19	-	-		-	-	18
	Average Weight	54	12	84	3	3		3	3	64
	Grams	838	140	1,915	5	15		5	10	2,928
	Grams/Episode	26	12	26	3	5		5	5	23
	Grams per 1,000 Population	0	0	0	0	0		0	0	0
Neonate with haemochromatosis	Patients	<5	<5	<5	<5	<5				<25
	Average Age	-	-	-	-	-				-
	Average Weight	3	2	3	3	2				3
	Grams	10	8	28	3	3				50
	Grams/Episode	5	3	3	3	3				3
	Grams per 1,000 Population	0	0	0	0	0				0
Newly Diagnosed Immune thrombocytopenic purpura (ITP)	Patients	300	241	228	109	56	21	7	20	979
	Average Age	59	58	59	61	50	62	47	56	58
	Average Weight	79	81	81	82	86	86	84	91	81

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	38,490	26,520	31,854	13,153	6,568	2,745	1,035	2,588	122,951
	Grams/Episode	54	59	31	62	64	29	61	66	46
	Grams per 1,000 Population	5	4	6	5	4	5	4	6	5
Non-Hodgkin lymphoma (NHL)	Patients	756	557	735	224	172	93	15	33	2,553
	Average Age	70	68	70	70	68	69	63	65	69
	Average Weight	77	79	79	81	77	82	81	78	79
	Grams	177,042	140,005	212,953	51,337	39,972	26,170	2,616	8,506	658,600
	Grams/Episode	25	22	24	22	21	20	28	21	23
	Grams per 1,000 Population	22	21	40	19	22	46	10	19	26
Other Haematological malignancy	Patients	160	74	132	17	33	10	<5	7	<433
	Average Age	64	59	71	58	61	63	6	74	65
	Average Weight	75	78	75	70	79	83	30	91	76
	Grams	33,094	18,044	33,843	3,460	7,102	3,892	13	1,963	101,410
	Grams/Episode	25	22	22	17	16	26	4	32	22
	Grams per 1,000 Population	4	3	6	1	4	7	0	4	4
Persistent Immune thrombocytopenic purpura (ITP)	Patients	154	96	79	40	33	11	<5	7	<5
	Average Age	58	50	59	59	59	57	69	65	57
	Average Weight	82	82	83	90	79	93	76	77	83
	Grams	31,568	18,148	14,849	9,916	4,565	1,615	430	925	82,014
	Grams/Episode	56	60	31	61	63	28	72	62	50
	Grams per 1,000 Population	4	3	3	4	3	3	2	2	3
Polymyositis (PM)	Patients	142	91	93	22	28	<5	<5	16	<396
	Average Age	63	61	60	67	56	81	23	61	61
	Average Weight	78	79	83	77	81	72	57	73	80
	Grams	59,725	44,588	41,540	10,538	15,820	915	140	6,650	179,915
	Grams/Episode	37	49	25	44	46	24	23	40	36
	Grams per 1,000 Population	7	7	8	4	9	2	1	15	7
Possible Common variable immune deficiency (CVID) -	Patients	442	159	131	33	44	6	<5	27	<832
	Average Age	60	51	56	50	41	50	41	51	55
	Average Weight	76	68	76	68	64	66	72	81	73



OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
below normal serum IgG but normal serum IgA level	Grams	150,938	49,267	45,318	8,873	13,022	1,725	745	10,877	280,763
	Grams/Episode	28	19	23	20	16	18	30	27	24
	Grams per 1,000 Population	19	8	9	3	7	3	3	24	11
Pregnant woman with previous fetal loss	Patients	<5	<5	<5						<15
	Average Age	22	38	34						33
	Average Weight	75	87	63						75
	Grams	1,140	2,758	2,440						6,338
	Grams/Episode	57	77	63						67
	Grams per 1,000 Population	0	0	0						0
Severe combined immunodeficiency (SCID)	Patients	18	9	9	<5	<5				<46
	Average Age	16	28	22	27	40				22
	Average Weight	36	58	56	80	105				51
	Grams	5,034	2,835	2,949	553	240				11,610
	Grams/Episode	18	17	16	21	8				17
	Grams per 1,000 Population	1	0	1	0	0				0
Severe reduction in all Ig isotypes with decreased or absent B-cells (e.g. XLA def)	Patients	37	43	25	9	12		<5	<5	<133
	Average Age	29	33	29	22	17		28	43	29
	Average Weight	65	65	68	50	45		60	84	62
	Grams	15,468	15,441	9,022	2,778	3,454		659	746	47,569
	Grams/Episode	29	22	20	19	13		18	25	22
	Grams per 1,000 Population	2	2	2	1	2		3	2	2
Severe reduction in at least two Ig isotypes with low/normal B-cells (e.g. CVID)	Patients	485	220	241	86	99	26	<5	42	<1,181
	Average Age	49	51	52	48	43	46	60	45	49
	Average Weight	75	77	76	70	73	79	77	79	75
	Grams	165,865	80,436	91,395	28,498	33,546	8,895	1,660	15,593	425,888
	Grams/Episode	26	23	24	25	16	16	47	27	23
	Grams per 1,000 Population	20	12	17	10	19	16	7	34	17
Severe reduction in serum IgG and IgA with	Patients	18	6	17	7	<5				<53
	Average Age	36	45	45	54	41				42
	Average Weight	57	81	66	69	67				66

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
normal/elevated IgM (e.g. CD40L def)	Grams	4,442	2,346	3,990	2,317	1,351				14,446
	Grams/Episode	18	26	16	28	11				18
	Grams per 1,000 Population	1	0	1	1	1				1
Stiff person syndrome	Patients	63	16	26	<5	11	<5		11	<135
	Average Age	61	54	61	56	66	53		50	60
	Average Weight	76	78	83	66	74	83		81	79
	Grams	36,443	7,758	17,650	1,495	7,343	2,515		4,963	78,165
	Grams/Episode	42	41	28	44	40	19		40	36
	Grams per 1,000 Population	5	1	3	1	4	4		11	3
Transient hypogammaglobulinaemia of infancy	Patients	<5		5	<5		<5			<20
	Average Age	3		17	3		6			5
	Average Weight	15		30	14		15			17
	Grams	173		237	64		77			551
	Grams/Episode	3		17	5		5			6
	Grams per 1,000 Population	0		0	0		0			0
<b>Total - Has an established therapeutic role</b>	<b>Patients</b>	<b>7,017</b>	<b>4,517</b>	<b>4,804</b>	<b>1,356</b>	<b>1,472</b>	<b>487</b>	<b>115</b>	<b>423</b>	<b>19,891</b>
	<b>Average Age</b>	<b>63</b>	<b>62</b>	<b>63</b>	<b>62</b>	<b>59</b>	<b>64</b>	<b>48</b>	<b>58</b>	<b>62</b>
	<b>Average Weight</b>	<b>78</b>	<b>78</b>	<b>80</b>	<b>79</b>	<b>77</b>	<b>82</b>	<b>79</b>	<b>81</b>	<b>79</b>
	<b>Grams</b>	<b>2,363,490</b>	<b>1,476,003</b>	<b>1,727,358</b>	<b>401,401</b>	<b>573,975</b>	<b>163,718</b>	<b>35,432</b>	<b>170,251</b>	<b>6,911,627</b>
	<b>Grams/Episode</b>	<b>34</b>	<b>31</b>	<b>25</b>	<b>29</b>	<b>29</b>	<b>22</b>	<b>45</b>	<b>39</b>	<b>30</b>
	<b>Grams per 1,000 Population</b>	<b>292</b>	<b>225</b>	<b>328</b>	<b>145</b>	<b>318</b>	<b>287</b>	<b>142</b>	<b>376</b>	<b>268</b>
<b>Has an emerging therapeutic role</b>										
Autoimmune haemolytic anaemia	Patients	43	42	32	10	7	<5		<5	+144
	Average Age	57	68	74	56	50	58		32	63
	Average Weight	71	67	76	77	69	90		54	72
	Grams	7,645	5,820	5,310	1,600	593	180		273	21,420
	Grams/Episode	42	54	37	62	22	12		45	42
	Grams per 1,000 Population	1	1	1	1	0	0		1	1
Bullous Pemphigoid	Patients	8	21	17	<5	6			<5	<62
	Average Age	55	67	63	74	66			75	65

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	95	89	90	86	87			70	89
	Grams	6,013	13,700	14,870	2,910	4,830			1,810	44,133
	Grams/Episode	50	64	47	36	56			44	51
	Grams per 1,000 Population	1	2	3	1	3			4	2
Cicatrical pemphigoid (CP)	Patients	<5	<5	8		<5				<23
	Average Age	69	78	65		70				66
	Average Weight	75	102	89		77				86
	Grams	4,000	400	6,510		170				11,080
	Grams/Episode	68	40	31		19				38
	Grams per 1,000 Population	0	0	1		0				0
Encephalitis associated with antibodies to AMPA receptor	Patients	<5								<5
	Average Age	58								58
	Average Weight	72								72
	Grams	390								390
	Grams/Episode	19								19
	Grams per 1,000 Population	0								0
Encephalitis associated with antibodies to CASPR2	Patients	12	<5	<5		<5				<27
	Average Age	64	69	43		74				61
	Average Weight	81	87	69		86				79
	Grams	5,423	335	1,340		945				8,043
	Grams/Episode	39	56	30		45				38
	Grams per 1,000 Population	1	0	0		1				0
Encephalitis associated with antibodies to DPPX	Patients	<5		<5						<10
	Average Age	57		39						45
	Average Weight	87		80						82
	Grams	910		780						1,690
	Grams/Episode	70		30						43
	Grams per 1,000 Population	0		0						0
	Patients	<5				<5	<5			<15
	Average Age	51				54	79			54

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Encephalitis associated with antibodies to GABA (A or B) receptor	Average Weight	78				60	53			73
	Grams	475				120	115			710
	Grams/Episode	34				40	58			37
	Grams per 1,000 Population	0				0	0			0
Encephalitis associated with antibodies to glycine receptor	Patients			<5						<5
	Average Age			55						55
	Average Weight			74						74
	Grams			1,745						1,745
	Grams/Episode			22						22
	Grams per 1,000 Population			0						0
Encephalitis associated with antibodies to LGI1	Patients	19	11	8		<5	<5			<48
	Average Age	67	67	62		84	67			67
	Average Weight	75	71	81		60	72			75
	Grams	6,958	1,818	2,020		780	120			11,695
	Grams/Episode	41	29	22		30	24			33
	Grams per 1,000 Population	1	0	0		0	0			0
Encephalitis associated with antibodies to NMDA receptor	Patients	34	13	18	<5	<5	<5	<5	<5	<88
	Average Age	41	48	45	45	33	31	28	27	42
	Average Weight	73	74	85	69	47	49	66	83	77
	Grams	8,538	3,235	5,215	235	440	240	675	1,350	19,928
	Grams/Episode	32	38	20	18	20	20	36	41	28
	Grams per 1,000 Population	1	0	1	0	0	0	3	3	1
Encephalitis associated with antibodies to VGKC	Patients	5	5	<5		<5				<19
	Average Age	52	66	49		67				56
	Average Weight	68	82	78		73				75
	Grams	2,103	1,555	1,405		1,530				6,593
	Grams/Episode	30	39	15		35				26
	Grams per 1,000 Population	0	0	0		1				0
Endemic pemphigus foliaceus	Patients		<5							<5
	Average Age		56							56

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight		72							72
	Grams		720							720
	Grams/Episode		60							60
	Grams per 1,000 Population		0							0
Evans syndrome child - with significant ITP	Patients			<5	<5					<10
	Average Age			11	13					12
	Average Weight			50	34					41
	Grams			60	175					235
	Grams/Episode			9	19					15
	Grams per 1,000 Population			0	0					0
Evans Syndrome with significant AIHA	Patients	<5	<5	<5		<5				<20
	Average Age	48	55	56		30				48
	Average Weight	67	85	81		54				72
	Grams	325	220	360		220				1,125
	Grams/Episode	65	73	36		44				49
	Grams per 1,000 Population	0	0	0		0				0
Existing patient - authorisation for IgG subclass deficiency	Patients	5	13	<5	<5	<5	<5	<5		<43
	Average Age	69	70	65	49	77	84	4		64
	Average Weight	125	78	72	62	100	49	13		83
	Grams	1,980	4,764	720	996	728	20	90		9,297
	Grams/Episode	23	30	14	20	14	7	3		22
	Grams per 1,000 Population	0	1	0	0	0	0	0		0
Haemophagocytic lymphohistiocytosis	Patients	33	14	14	<5		<5		<5	<67
	Average Age	49	53	60	24		2		24	50
	Average Weight	68	64	73	60		18		84	68
	Grams	4,265	2,170	2,260	420		35		165	9,315
	Grams/Episode	42	46	38	42		9		33	41
	Grams per 1,000 Population	1	0	0	0		0		0	0
Heart and kidney transplant	Patients		<5				<5			<10
	Average Age		68				49			61

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight		76				50			66
	Grams		330				75			405
	Grams/Episode		22				8			17
	Grams per 1,000 Population		0				0			0
Heart and lung transplant	Patients					<5				<5
	Average Age					33				33
	Average Weight					76				76
	Grams					265				265
	Grams/Episode					38				38
	Grams per 1,000 Population					0				0
Heart transplant	Patients	20	6	5						30
	Average Age	49	58	48						50
	Average Weight	80	82	73						78
	Grams	2,275	940	1,880						5,095
	Grams/Episode	17	38	24						21
	Grams per 1,000 Population	0	0	0						0
Histiolymplocytosis	Patients	<5								1<5
	Average Age	68								68
	Average Weight	59								59
	Grams	95								95
	Grams/Episode	32								32
	Grams per 1,000 Population	0								0
Hypogammaglobulinaemia following B cell depletion therapy	Patients	219	150	147	34	57	15	<5	11	<632
	Average Age	59	57	59	59	48	56	47	56	57
	Average Weight	76	78	76	80	70	75	66	82	76
	Grams	51,813	29,346	39,433	4,619	14,178	4,386	225	1,368	145,366
	Grams/Episode	24	24	20	24	13	21	28	27	21
	Grams per 1,000 Population	6	4	7	2	8	8	1	3	6
	Patients	143	112	103	6	6	5	<5	7	<384
	Average Age	57	60	57	59	65	41	78	55	58

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Hypogammaglobulinaemia following Solid organ transplantation	Average Weight	68	70	73	86	74	74	92	74	71
	Grams	26,719	26,736	22,136	1,404	1,039	1,290	64	2,017	81,406
	Grams/Episode	23	21	15	13	13	13	64	20	19
	Grams per 1,000 Population	3	4	4	1	1	2	0	4	3
Idiopathic opsoclonus-myoclonus ataxia	Patients	8	<5	<5	<5	5	<5			<33
	Average Age	16	2	3	56	21	3			20
	Average Weight	34	14	18	79	36	18			37
	Grams	1,252	108	198	2,365	1,295	235			5,452
	Grams/Episode	20	5	10	72	21	18			26
	Grams per 1,000 Population	0	0	0	1	1	0			0
IgA pemphigus foliaceus	Patients	<5		<5						<10
	Average Age	78		58						66
	Average Weight	101		70						83
	Grams	1,760		560						2,320
	Grams/Episode	117		25						63
	Grams per 1,000 Population	0		0						0
IgM paraproteinaemic demyelinating neuropathy	Patients	35	19	26	5	<5	<5		<5	<100
	Average Age	76	73	73	66	80	77		58	74
	Average Weight	75	85	83	79	70	81		75	79
	Grams	17,985	8,693	11,518	1,310	3,345	1,485		360	44,695
	Grams/Episode	45	43	27	25	45	28		60	37
	Grams per 1,000 Population	2	1	2	0	2	3		1	2
ITP - child - chronic	Patients	<5	9	7		<5		<5	<5	<36
	Average Age	7	8	7		3		11	14	8
	Average Weight	28	40	28		16		36	97	33
	Grams	508	950	588		13		30	98	2,185
	Grams/Episode	30	25	18		4		30	98	24
	Grams per 1,000	0	0	0		0		0	0	0
ITP - child - newly diagnosed	Patients	30	17	14	6	12	<5	<5	<5	<93
	Average Age	6	5	4	6	3	-	-	12	5

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Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	29	23	23	25	15	8	9	39	24
	Grams	1,383	530	283	283	183	23	15	80	2,778
	Grams/Episode	26	18	10	22	12	5	8	40	19
	Grams per 1,000 Population	0	0	0	0	0	0	0	0	0
ITP - child - persistent	Patients	8	11	6		5			<5	<35
	Average Age	7	9	3		2			13	6
	Average Weight	24	37	16		17			87	26
	Grams	353	388	100		138			88	1,065
	Grams/Episode	24	22	8		14			88	19
	Grams per 1,000 Population	0	0	0		0			0	0
Kidney transplant	Patients	106	266	56	29	28	25	9	8	517
	Average Age	46	53	48	49	52	47	40	46	50
	Average Weight	80	74	81	78	80	86	78	72	77
	Grams	15,240	120,003	15,683	8,670	5,150	13,435	1,850	1,320	181,350
	Grams/Episode	24	31	14	31	38	29	31	33	27
	Grams per 1,000 Population	2	18	3	3	3	24	7	3	7
Liver and kidney transplant	Patients	<5	<5		<5					<15
	Average Age	31	47		56					43
	Average Weight	62	62		105					72
	Grams	373	445		245					1,063
	Grams/Episode	34	34		35					34
	Grams per 1,000 Population	0	0		0					0
Liver transplant	Patients	<5	<5		<5					<15
	Average Age	21	49		25					41
	Average Weight	27	87		78					76
	Grams	85	595		160					840
	Grams/Episode	14	24		40					24
	Grams per 1,000 Population	0	0		0					0
Lung transplant	Patients	34	95	<5	<5	10	<5		<5	<159
	Average Age	49	57	52	50	48	60		45	55



OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	68	75	69	68	62	68		53	72
	Grams	5,625	23,260	505	1,375	3,023	685		100	34,573
	Grams/Episode	29	23	24	20	31	24		100	25
	Grams per 1,000 Population	1	4	0	0	2	1		0	1
Macrophage activation syndrome	Patients	7	<5	<5						<24
	Average Age	46	29	9						38
	Average Weight	76	82	39						75
	Grams	955	428	78						1,460
	Grams/Episode	45	39	26						42
	Grams per 1,000 Population	0	0	0						0
Monophasic acute disseminated encephalomyelitis (ADEM)	Patients	33	6	10	<5	7	<5	<5		<71
	Average Age	33	46	40	3	16	67	6		34
	Average Weight	67	48	55	17	40	80	24		59
	Grams	4,575	458	963	75	583	160	48		6,860
	Grams/Episode	39	23	18	13	24	16	12		29
	Grams per 1,000 Population	1	0	0	0	0	0	0		0
Mucous Membrane Pemphigoid (MMP)	Patients	<5	10	9		<5	<5		<5	<39
	Average Age	61	67	69		68	51		85	68
	Average Weight	93	92	81		69	71		54	82
	Grams	3,503	8,375	5,155		2,388	1,820		1,415	22,655
	Grams/Episode	56	63	27		26	130		67	44
	Grams per 1,000 Population	0	1	1		1	3		3	1
Multiphasic acute disseminated encephalomyelitis (ADEM)	Patients	5				<5				<10
	Average Age	56				2				51
	Average Weight	80				13				73
	Grams	793				38				830
	Grams/Episode	30				13				29
	Grams per 1,000 Population	0				0				0
Other Hypogammaglobulinaemia	Patients	271	120	218	17	34	15	<5	13	<689
	Average Age	65	61	64	60	47	54	66	67	62

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Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
unrelated to haematological malignancies or haemopoietic stem cell transplantation (HSCT)	Average Weight	77	73	76	81	63	72	63	84	75
	Grams	72,738	28,627	65,245	4,270	7,625	4,393	305	3,946	187,148
	Grams/Episode	25	23	21	18	13	18	28	25	22
	Grams per 1,000 Population	9	4	12	2	4	8	1	9	7
Other transplant	Patients			<5	<5					<10
	Average Age			62	33					59
	Average Weight			101	42					94
	Grams			495	15					510
	Grams/Episode			22	5					20
	Grams per 1,000 Population			0	0					0
Pancreas and kidney transplant	Patients	<5	7	<5	<5		<5			<27
	Average Age	35	43	40	32		57			41
	Average Weight	70	71	82	66		80			75
	Grams	140	663	1,650	878		240			3,570
	Grams/Episode	35	17	36	34		20			28
	Grams per 1,000 Population	0	0	0	0		0			0
Paraneoplastic associated breast cancer	Patients					<5	<5			<10
	Average Age					84	58			72
	Average Weight					85	50			69
	Grams					1,105	180			1,285
	Grams/Episode					85	16			54
	Grams per 1,000 Population					1	0			0
Paraneoplastic associated neuroblastoma	Patients	<5	<5	<5		<5				<20
	Average Age	7	2	2		1				2
	Average Weight	26	11	12		11				14
	Grams	120	113	45		88				365
	Grams/Episode	20	8	6		7				9
	Grams per 1,000 Population	0	0	0		0				0
Paraneoplastic associated other tumour type	Patients	<5		<5						<10
	Average Age	59		77						69

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	61		73						67
	Grams	245		145						390
	Grams/Episode	27		13						20
	Grams per 1,000 Population	0		0						0
Paraneoplastic associated small cell lung cancer	Patients	<5								<5
	Average Age	61								61
	Average Weight	75								75
	Grams	135								135
	Grams/Episode	15								15
	Grams per 1,000 Population	0								0
Pemphigus erythematosus	Patients	<5	<5	<5						<15
	Average Age	79	51	52						62
	Average Weight	85	59	106						83
	Grams	340	635	2,200						3,175
	Grams/Episode	21	49	169						76
	Grams per 1,000 Population	0	0	0						0
Pemphigus vulgaris	Patients	8	24	<5	6	<5			<5	<53
	Average Age	63	59	73	58	59			37	62
	Average Weight	98	77	85	77	91			79	84
	Grams	7,250	11,633	3,525	6,700	3,908			1,820	34,835
	Grams/Episode	65	63	24	62	42			140	53
	Grams per 1,000 Population	1	2	1	2	2			4	1
Post-transfusion purpura (PTP)	Patients	<5	<5		<5					<15
	Average Age	70	53		81					69
	Average Weight	81	50		86					73
	Grams	230	200		380					810
	Grams/Episode	77	50		76					68
	Grams per 1,000 Population	0	0		0					0
	Patients	12	<5	6			<5			<28
	Average Age	57	30	46			4			49

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Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Recurrent acute disseminated encephalomyelitis (ADEM)	Average Weight	75	64	60			18			67
	Grams	4,110	380	880			210			5,580
	Grams/Episode	33	42	28			15			31
	Grams per 1,000 Population	1	0	0			0			0
Sero-negative autoimmune encephalitis	Patients	79	26	17	<5	11	<5		6	<146
	Average Age	47	59	54	38	44	13		27	47
	Average Weight	74	81	74	70	74	42		59	73
	Grams	26,585	7,768	4,645	413	2,270	663		2,250	44,593
	Grams/Episode	36	42	25	59	29	9		49	34
	Grams per 1,000 Population	3	1	1	0	1	1		5	2
Sero-negative limbic encephalitis	Patients	25	<5	22		<5	<5		<5	<67
	Average Age	55	20	49		54	46		62	50
	Average Weight	79	56	71		75	83		100	74
	Grams	7,915	875	7,610		900	910		800	19,010
	Grams/Episode	37	23	22		64	35		44	29
	Grams per 1,000 Population	1	0	1		0	2		2	1
Specific antibody deficiency	Patients	192	72	64	29	93	<5	<5	12	<466
	Average Age	58	52	58	57	42	69	29	46	53
	Average Weight	71	74	76	67	59	86	49	79	69
	Grams	53,886	19,881	20,246	7,656	24,918	1,160	20	4,326	132,091
	Grams/Episode	22	20	21	17	15	14	20	30	20
	Grams per 1,000 Population	7	3	4	3	14	2	0	10	5
Staphylococcal TSS	Patients	13	31	13	10	7				74
	Average Age	30	42	39	39	55				39
	Average Weight	83	79	77	87	91				81
	Grams	1,593	3,458	1,510	1,425	965				8,950
	Grams/Episode	72	82	37	84	97				68
	Grams per 1,000 Population	0	1	0	1	1				0
	Patients	12	16	<5			<5		<5	<43
	Average Age	31	51	15			74		53	46

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Stevens–Johnson syndrome / toxic epidermal necrolysis overlap (SJS/TEN)	Average Weight	65	71	148			90		76	74
	Grams	1,983	2,490	200			270		140	5,083
	Grams/Episode	51	64	67			18		28	50
	Grams per 1,000 Population	0	0	0			0		0	0
Streptococcal TSS	Patients	73	154	49	26	43	9	10	6	370
	Average Age	37	39	46	48	43	46	43	41	42
	Average Weight	78	76	85	90	66	106	58	78	80
	Grams	8,713	19,270	6,453	3,665	4,970	1,225	928	910	46,133
	Grams/Episode	89	89	49	126	101	25	66	101	77
	Grams per 1,000 Population	1	3	1	1	3	2	4	2	2
Suspected autoimmune encephalitis	Patients	131	79	42	14	23	<5	5	11	<307
	Average Age	48	62	48	60	49	80	41	50	52
	Average Weight	72	74	81	78	74	72	68	113	76
	Grams	33,603	16,593	12,930	1,748	7,003	60	765	3,770	76,470
	Grams/Episode	36	34	23	30	33	10	31	61	33
	Grams per 1,000 Population	4	3	2	1	4	0	3	8	3
Suspected autoimmune limbic encephalitis	Patients	38	8	26	<5	5	<5	<5		<92
	Average Age	55	75	53	44	64	43	29		55
	Average Weight	72	68	72	87	72	68	65		72
	Grams	8,415	1,690	9,310	325	1,300	135	130		21,305
	Grams/Episode	31	35	24	46	46	135	26		28
	Grams per 1,000 Population	1	0	2	0	1	0	1		1
Thymoma-associated hypogammaglobulinaemia (Goods Syndrome)	Patients	8	<5	5	<5	6	<5		<5	<38
	Average Age	63	66	67	63	72	69		59	66
	Average Weight	69	76	72	87	63	77		66	73
	Grams	2,976	1,155	1,944	883	1,966	424		110	9,457
	Grams/Episode	19	15	21	12	24	9		28	18
	Grams per 1,000 Population	0	0	0	0	1	1		0	0
Toxic epidermal necrolysis (TEN)	Patients	<5	7				<5			<17
	Average Age	45	58				63			55

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	81	77				60			77
	Grams	503	970				120			1,593
	Grams/Episode	56	39				60			44
	Grams per 1,000 Population	0	0				0			0
<b>Total - Has an emerging therapeutic role</b>	<b>Patients</b>	<b>1,653</b>	<b>1,362</b>	<b>968</b>	<b>228</b>	<b>387</b>	<b>104</b>	<b>40</b>	<b>98</b>	<b>4,798</b>
	<b>Average Age</b>	<b>57</b>	<b>56</b>	<b>58</b>	<b>56</b>	<b>48</b>	<b>50</b>	<b>34</b>	<b>53</b>	<b>56</b>
	<b>Average Weight</b>	<b>74</b>	<b>74</b>	<b>77</b>	<b>75</b>	<b>66</b>	<b>76</b>	<b>60</b>	<b>80</b>	<b>74</b>
	<b>Grams</b>	<b>415,788</b>	<b>372,716</b>	<b>280,704</b>	<b>55,197</b>	<b>99,006</b>	<b>34,293</b>	<b>5,144</b>	<b>28,513</b>	<b>1,291,360</b>
	<b>Grams/Episode</b>	<b>29</b>	<b>30</b>	<b>22</b>	<b>28</b>	<b>21</b>	<b>22</b>	<b>29</b>	<b>37</b>	<b>26</b>
	<b>Grams per 1,000 Population</b>	<b>51</b>	<b>57</b>	<b>53</b>	<b>20</b>	<b>55</b>	<b>60</b>	<b>21</b>	<b>63</b>	<b>50</b>
<b>Has application in exceptional circumstances only</b>										
Acquired bleeding disorder, other coagulation factors (Prothrombin, factor V, factor VII, factor X, factor XI, and factor XIII)	Patients	<5	<5			<5				<15
	Average Age	59	82			79				79
	Average Weight	68	81			96				87
	Grams	25	195			90				310
	Grams/Episode	25	33			15				24
	Grams per 1,000 Population	0	0			0				0
Acquired haemophilia A	Patients	<5	<5							<10
	Average Age	74	84							79
	Average Weight	84	73							78
	Grams	390	218							608
	Grams/Episode	49	27							38
	Grams per 1,000 Population	0	0							0
Acquired von Willebrand syndrome	Patients	<5	<5	6	6	<5	<5		<5	<37
	Average Age	69	81	60	68	76	60		74	64
	Average Weight	49	71	85	76	87	75		79	78
	Grams	685	490	5,100	4,043	175	300		560	11,353
	Grams/Episode	31	38	41	65	88	19		62	46
	Grams per 1,000 Population	0	0	1	1	0	1		1	0
	Patients	<5		<5		<5				<15

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Anti-neutrophil cytoplasmic antibody (ANCA) (PR3 or MPO)-positive idiopathic rapidly progressive glomerulonephritis	Average Age	47		74		38				44
	Average Weight	131		68		139				128
	Grams	340		70		800				1,210
	Grams/Episode	49		18		40				39
	Grams per 1,000 Population	0		0		0				0
Ataxic sensory neuropathy	Patients	5				<5			<5	<15
	Average Age	60				85			71	72
	Average Weight	95				76			69	84
	Grams	2,700				1,160			805	4,665
	Grams/Episode	55				27			58	44
	Grams per 1,000 Population	0				1			2	0
Atypical rolandic epilepsy	Patients		5	<5						<10
	Average Age		11	13						12
	Average Weight		39	38						38
	Grams		440	1,598						2,038
	Grams/Episode		13	27						22
	Grams per 1,000 Population		0	0						0
Autoimmune neutropenia	Patients	6	8	8					<5	<27
	Average Age	69	52	68					54	64
	Average Weight	82	89	76					79	81
	Grams	1,000	1,405	2,025					125	4,555
	Grams/Episode	53	61	43					125	51
	Grams per 1,000 Population	0	0	0					0	0
Autoimmune retinopathy	Patients	<5	5	<5		<5				<18
	Average Age	58	63	62		78				62
	Average Weight	84	93	72		98				84
	Grams	700	3,600	620		240				5,160
	Grams/Episode	41	90	20		120				57
	Grams per 1,000 Population	0	1	0		0				0
Autonomic neuropathy	Patients	6		<5						<11

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Age	60		61						60
	Average Weight	70		88						75
	Grams	1,673		910						2,583
	Grams/Episode	28		35						30
	Grams per 1,000 Population	0		0						0
Catastrophic anti-phospholipid syndrome	Patients	5	<5	<5		<5		<5		<25
	Average Age	63	49	55		51		40		58
	Average Weight	92	87	74		90		64		89
	Grams	1,370	450	260		555		25		2,660
	Grams/Episode	43	75	52		40		25		46
	Grams per 1,000 Population	0	0	0		0		0		0
Congenital haemophilia A with acquired factor VIII inhibitor	Patients	<5								<5
	Average Age	66								66
	Average Weight	65								65
	Grams	130								130
	Grams/Episode	65								65
	Grams per 1,000 Population	0								0
Eosinophilic granulomatosis with polyangiitis (Churg-Strauss Syndrome)	Patients	<5	<5			<5				<15
	Average Age	44	57			41				45
	Average Weight	53	57			65				62
	Grams	105	520			685				1,310
	Grams/Episode	35	52			25				33
	Grams per 1,000 Population	0	0			0				0
Epidermolysis bullosa acquisita	Patients		<5			<5				<10
	Average Age		63			75				71
	Average Weight		100			97				98
	Grams		320			1,005				1,325
	Grams/Episode		40			67				58
	Grams per 1,000 Population		0			1				0
	Patients		<5			<5				<10



OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Granulomatosis with polyangiitis (Wegener Granulomatosis)	Average Age		65			30				39
	Average Weight		83			80				81
	Grams		305			1,083				1,388
	Grams/Episode		31			40				38
	Grams per 1,000 Population		0			1				0
Graves ophthalmopathy	Patients	<5				<5				<10
	Average Age	60				62				62
	Average Weight	125				71				87
	Grams	500				1,270				1,770
	Grams/Episode	50				53				52
	Grams per 1,000 Population	0				1				0
Haemolytic disease of the fetus	Patients	<5	5	<5	<5	<5				<25
	Average Age	28	34	38	28	38				35
	Average Weight	71	76	60	71	65				67
	Grams	725	4,743	1,838	1,338	715				9,358
	Grams/Episode	73	70	19	64	65				45
	Grams per 1,000 Population	0	1	0	0	0				0
Hyperhaemolysis syndrome	Patients	<5	<5		<5					<15
	Average Age	32	79		27					37
	Average Weight	75	75		69					73
	Grams	205	150		140					495
	Grams/Episode	41	150		70					62
	Grams per 1,000 Population	0	0		0					0
Landau Kleffner syndrome	Patients	<5	<5							<10
	Average Age	26	9							16
	Average Weight	80	24							47
	Grams	1,040	140							1,180
	Grams/Episode	80	7							37
	Grams per 1,000 Population	0	0							0
Lennox-Gastaut syndrome	Patients	<5		7		<5			<5	<22

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Age	14		5		4			14	9
	Average Weight	38		21		19			52	29
	Grams	1,515		1,160		133			640	3,448
	Grams/Episode	30		12		19			38	20
	Grams per 1,000 Population	0		0		0			1	0
LETMs	Patients	10	<5							<15
	Average Age	54	23							47
	Average Weight	67	67							67
	Grams	1,827	865							2,692
	Grams/Episode	25	38							28
	Grams per 1,000 Population	0	0							0
Microscopic polyangiitis	Patients			<5		<5				<10
	Average Age			62		42				48
	Average Weight			90		68				75
	Grams			250		1,770				2,020
	Grams/Episode			13		40				32
	Grams per 1,000 Population			0		1				0
NMOSD–AQP4 ab positive	Patients	8	<5	<5		<5				<23
	Average Age	52	45	54		64				53
	Average Weight	65	98	85		61				72
	Grams	2,295	333	490		224				3,342
	Grams/Episode	35	28	20		20				29
	Grams per 1,000 Population	0	0	0		0				0
NMOSD–MOG ab positive	Patients	29	16	<5	6	8			<5	<68
	Average Age	37	40	28	43	17			78	37
	Average Weight	78	86	65	73	49			90	76
	Grams	11,578	4,855	180	3,365	2,000			758	22,735
	Grams/Episode	42	43	23	45	33			54	42
	Grams per 1,000 Population	1	1	0	1	1			2	1
NMOSD–seronegative	Patients	26	10	7	<5	<5				<53

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Age	57	42	47	10	30				50
	Average Weight	81	91	63	42	92				80
	Grams	7,040	3,143	1,530	85	1,680				13,478
	Grams/Episode	35	45	21	43	45				35
	Grams per 1,000 Population	1	0	0	0	1				1
Paediatric acute neuropsychiatric disorders (PANS)	Patients	20	<5	<5		<5	<5	<5	<5	<50
	Average Age	13	13	12		12	11	14	17	12
	Average Weight	52	71	56		40	52	68	63	56
	Grams	10,540	1,800	2,115		160	528	45	255	15,443
	Grams/Episode	70	38	41		32	12	23	85	51
	Grams per 1,000 Population	1	0	0		0	1	0	1	1
Paediatric autoimmune neuropsychiatric disorder (PANDAS)	Patients	<5	<5	8						<18
	Average Age	13	15	15						14
	Average Weight	52	70	71						68
	Grams	2,023	350	6,228						8,600
	Grams/Episode	61	50	38						42
	Grams per 1,000 Population	0	0	1						0
Painful small fibre neuropathy	Patients	5	<5	<5	<5	<5		<5	<5	<35
	Average Age	64	58	61	62	63		77	62	63
	Average Weight	77	82	58	79	59		80	80	72
	Grams	1,515	840	1,460	1,350	660		880	880	7,585
	Grams/Episode	40	28	26	40	41		42	44	35
	Grams per 1,000 Population	0	0	0	0	0		4	2	0
Pure red cell aplasia – associated B19 infection	Patients		<5	5	<5	<5	<5	<5	<5	<35
	Average Age		11	46	82	8	38	8	38	41
	Average Weight		27	65	71	26	67	26	65	59
	Grams		413	1,205	430	50	270	50	355	2,773
	Grams/Episode		21	17	36	25	14	25	71	21
	Grams per 1,000 Population		0	0	0	0	0	0	1	0
	Patients	<5	<5	<5	<5	<5	<5			<30

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Pure red cell aplasia – autoimmune mediated	Average Age	48	68	38	43	70	80			56
	Average Weight	79	85	57	85	73	80			78
	Grams	840	1,000	230	150	140	-			2,360
	Grams/Episode	38	71	29	50	140	-			43
	Grams per 1,000 Population	0	0	0	0	0				0
Pyoderma Gangrenosum	Patients	12	41	20	<5	<5	<5		<5	<92
	Average Age	60	61	65	38	53	69		41	62
	Average Weight	91	90	86	140	75	105		89	90
	Grams	4,645	39,725	11,995	840	2,980	1,435		370	61,990
	Grams/Episode	43	74	31	29	41	29		37	52
	Grams per 1,000 Population	1	6	2	0	2	3		1	2
Rasmussen encephalitis	Patients	9	8	6	<5	<5			<5	<38
	Average Age	26	35	39	40	35			65	36
	Average Weight	60	62	66	115	55			67	65
	Grams	2,665	2,870	1,373	630	805			340	8,683
	Grams/Episode	39	45	15	53	40			24	32
	Grams per 1,000 Population	0	0	0	0	0			1	0
Relapsing remitting multiple sclerosis	Patients	19	12	5					<5	<41
	Average Age	44	46	67					51	51
	Average Weight	81	80	73					60	78
	Grams	4,610	3,780	2,200					780	11,370
	Grams/Episode	32	38	24					60	33
	Grams per 1,000 Population	1	1	0					2	0
Scleromyxedema – skin and systemic disease	Patients	6	<5		<5	<5				<21
	Average Age	69	71		78	71				71
	Average Weight	74	66		59	75				69
	Grams	3,078	1,715		1,665	1,200				7,658
	Grams/Episode	38	28		54	75				40
	Grams per 1,000 Population	0	0		1	1				0
	Patients		<5		<5	<5				<15

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Scleromyxedema – skin involvement only	Average Age		85		43	63				63
	Average Weight		89		91	71				77
	Grams		1,340		1,300	4,060				6,700
	Grams/Episode		79		76	54				61
	Grams per 1,000 Population		0		0	2				0
Sensorimotor axonal neuropathy	Patients	7	<5	<5	<5			<5		<27
	Average Age	70	75	56	63			73		70
	Average Weight	73	56	76	57			86		70
	Grams	2,835	400	210	165			350		3,960
	Grams/Episode	32	22	105	18			50		31
	Grams per 1,000 Population	0	0	0	0			1		0
Susac syndrome	Patients	12	<5	7		<5				<27
	Average Age	40	49	51		59				48
	Average Weight	95	73	86		68				86
	Grams	9,262	1,925	5,740		2,825				19,752
	Grams/Episode	46	34	34		41				40
	Grams per 1,000 Population	1	0	1		2				1
Systemic capillary leak syndrome	Patients	5	<5	<5	<5	<5			<5	<29
	Average Age	49	73	65	52	33			72	59
	Average Weight	72	70	71	71	80			74	72
	Grams	1,930	1,190	2,175	1,730	1,040			1,320	9,385
	Grams/Episode	37	37	33	69	80			88	46
	Grams per 1,000 Population	0	0	0	1	1			3	0
Vaccine induced immune thrombotic thrombocytopenia (VITT)	Patients	<5								<5
	Average Age	37								37
	Average Weight	51								51
	Grams	100								100
	Grams/Episode	50								50
	Grams per 1,000 Population	0								0
West syndrome	Patients			<5						<5

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Age			8						8
	Average Weight			23						23
	Grams			270						270
	Grams/Episode			11						11
	Grams per 1,000 Population			0						0
Total - Has application in exceptional circumstances only	Patients	218	154	113	30	52	7	5	14	582
	Average Age	46	51	47	53	49	46	67	56	48
	Average Weight	76	80	71	80	72	78	77	72	75
	Grams	79,883	79,518	51,230	17,230	27,504	2,533	1,350	7,188	266,435
	Grams/Episode	42	54	28	52	43	19	41	53	41
	Grams per 1,000 Population	10	12	10	6	15	4	5	16	10
<b>Use is not supported</b>										
Sepsis	Patients		<5			<5				<10
	Average Age		52			2				35
	Average Weight		123			16				87
	Grams		250			33				283
	Grams/Episode		125			33				94
	Grams per 1,000 Population		0			0				0
Total - Use is not supported	<b>Patients</b>	-	<b>&lt;5</b>	-	-	<b>&lt;5</b>	-	-	-	<b>&lt;10</b>
	<b>Average Age</b>	-	<b>52</b>	-	-	<b>2</b>	-	-	-	<b>35</b>
	<b>Average Weight</b>	-	<b>123</b>	-	-	<b>16</b>	-	-	-	<b>87</b>
	<b>Grams</b>	-	<b>250</b>	-	-	<b>33</b>	-	-	-	<b>283</b>
	<b>Grams/Episode</b>	-	<b>125</b>	-	-	<b>33</b>	-	-	-	<b>94</b>
	<b>Grams per 1,000 Population</b>		<b>0</b>			<b>0</b>				<b>0</b>
Total	Patients	8,839	6,002	5,867	1,609	1,904	597	160	533	25,158
	Average Age	61	60	62	61	57	62	46	58	61
	Average Weight	77	78	79	79	75	81	75	80	78
	Grams	2,859,161	1,928,487	2,059,292	473,827	700,517	200,544	41,925	205,951	8,469,704
	Grams/Episode	33	32	25	29	28	22	42	39	30
	Grams per 1,000 Population	353	294	391	172	388	352	168	454	329

Note 1: All patient counts are distinct counts. Each patient is counted only once. This may result in the sum of the state and territory totals being greater than the national total.

## APPENDIX E – SYSTEM SOURCE FOR TABLES AND FIGURES

Table 1: Ig growth for the last 5 years	IDMS
Table 2: Go live dates for BloodSTAR	IDMS
Table 3: Grams recorded in the different systems held by the NBA	IDMS & BloodSTAR
Table 4: Percentage change in grams issued over time by state and territory	IDMS
Table 5: Issues of domestic Ig compared with imported Ig	IDMS
Table 6: Issues of domestic Ig compared with imported Ig and public versus private Australian Health Providers	IDMS
Table 7: Patient numbers by state and territory	BloodSTAR
Table 8: Patient numbers and average weight by age range	BloodSTAR
Table 9: Ig grams dispensed by criteria category	BloodSTAR & STARS
Table 10: Ig grams dispensed by speciality and state and territory for 2022-23	BloodSTAR
Table 11: Patients dispensed Ig by speciality and state and territory for 2022-23	BloodSTAR
Table 12: New patients dispensed Ig by speciality and state and territory for 2022-23	BloodSTAR
Table 13: Grams dispensed by states and territories and medical condition for 2022-23	BloodSTAR
Table 14: Patients dispensed by SCIg/NHIg/IVIg medical conditions and product for 2022-23	BloodSTAR
Table 15: Grams dispensed by SCIg/NHIg/IVIg medical conditions and product for 2022-23	BloodSTAR
Table 16: Patients dispensed by SCIg medical conditions, and state and territory for 2022-23	BloodSTAR
Table 17: Grams dispensed by SCIg medical conditions, and state and territory for 2022-23	BloodSTAR
Figure 1: Snapshot	All
Figure 2: Per cent Issued grams by medical condition	BloodSTAR
Figure 3: Ten-year trend in issues of Ig	IDMS
Figure 4: Ten-year trend in expenditure on Ig	IDMS
Figure 5: Ig expenditure as a proportion of the national blood budget	IDMS
Figure 6: New and total patients for the last 10 years	BloodSTAR & STARS
Figure 7: Patient age relative to Australian average	BloodSTAR
Figure 8: Grams of Ig dispensed by speciality	BloodSTAR & STARS
Figure 9: Grams of Ig dispensed by top 10 medical conditions	BloodSTAR & STARS
Figure 10: NHIg grams issued and dispensed and grams issued per 1,000 population	IDMS
Appendix A: Background	All
Appendix B: Acronyms and Glossary	All
Appendix C: Version 3 Conditions by Speciality	BloodSTAR
Appendix D: Dataset of Ig Supply by State/Territory 2022-23	BloodSTAR