



**NATIONAL BLOOD AUTHORITY**  
**AUSTRALIA**

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

**ANNUAL REPORT 2021-22**





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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 immunoglobulin (IVIg), subcutaneous immunoglobulin (SCIg), and normal human immunoglobulin (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 2021-22, 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 2021-22 139 specific conditions or 56 medical conditions 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 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 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 2021-22, and for this reason specific analysis focuses on these groups.

### Issues of Immunoglobulin

Immunoglobulin comprises approximately 56 per cent of total blood expenditure each year. Demand for Ig was growing at an annual rate of more than 10 per cent up to and including 2017-18. This growth in demand moderated and did not exceed 7.4 per cent in each of last 4 years. This is the lowest annual rate of increase since 2004-05 when Australia first secured an adequate national sufficiency of Ig supply through the importation of Ig by the NBA. Growth since 2016-17 is shown below.

**Table 1: Ig growth for the last 5 years**

2017-18	2018-19	2019-20	2020-21	2021-22
10.6%	7.2%	6.7%	7.4%	6.9%

In 2021-22, a total of approximately 8 million grams of Ig was issued nationally at a cost of \$810.4 million (including the cost of plasma for fractionation). Of this amount, about 58 per cent of Ig was produced in Australia and 42 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.

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 five years, with extension options available. The suppliers are CSL Behring, Grifols Australia Pty Ltd (Grifols), Takeda Pharmaceutical Company (Takeda) and Octapharma Pty Ltd (Octapharma).

# Report Snapshot

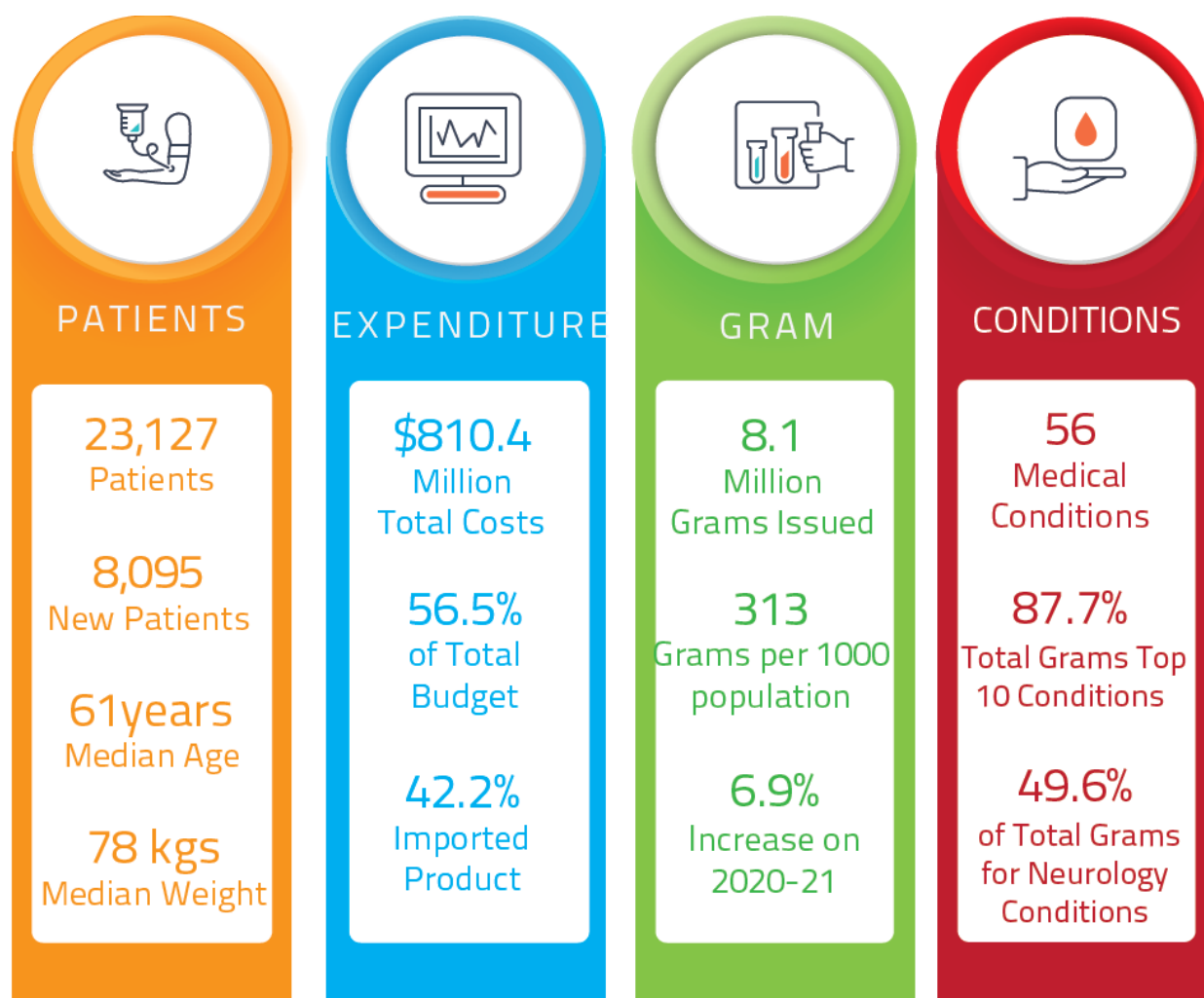


Figure 1: Snapshot

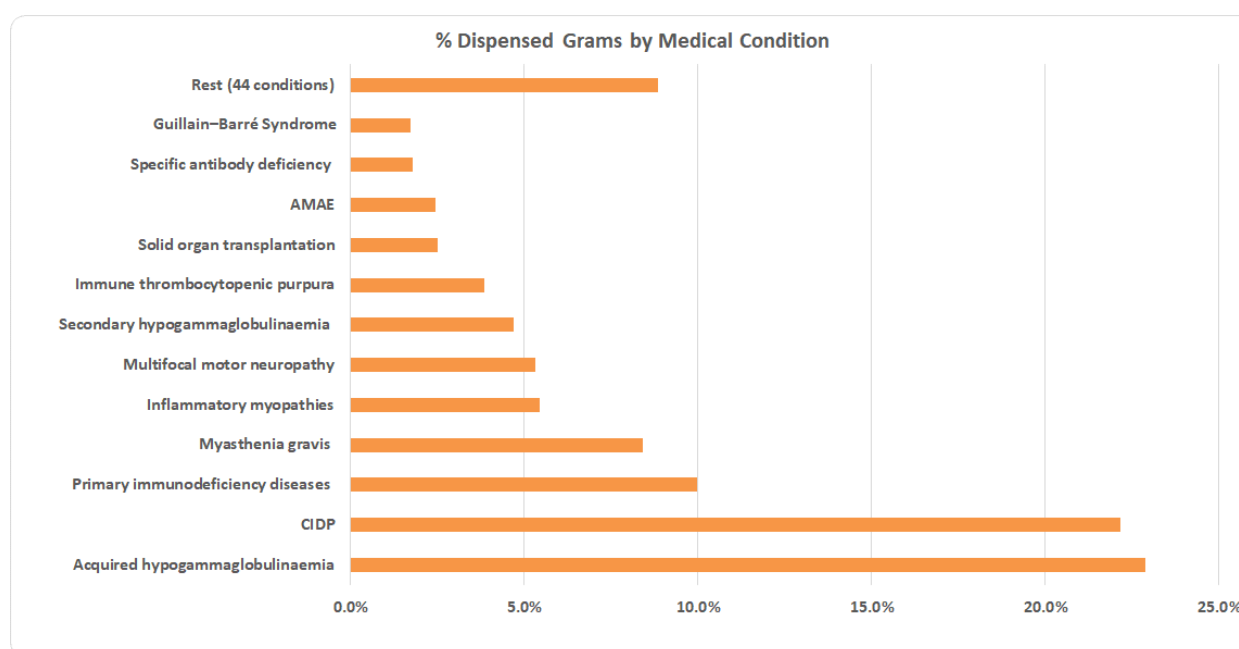


Figure 2: Per cent dispensed grams by medical condition



# 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 IVIg and SCIg, or
  - received both domestic and imported product.
- 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 2020-21 could be recorded in 2021-22.
- 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 three 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 NBAs BloodNet and BloodSTAR systems.

**Table 3** shows the reconciliation between the 3 systems used for this report. A variance of 2.2 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	2,802,986	2,701,090	101,897	3.6%
VIC	1,780,164	1,745,372	34,792	2.0%
QLD	1,976,360	1,963,638	12,722	0.6%
SA	436,091	428,408	7,683	1.8%
WA	660,819	642,279	18,540	2.8%
TAS	176,058	175,223	835	0.5%
NT	36,996	36,373	623	1.7%
ACT	181,540	178,419	3,121	1.7%
<b>Total</b>	<b>8,051,013</b>	<b>7,870,800</b>	<b>180,213</b>	<b>2.2%</b>

*\*Note: Includes NHlg*

# Trends

## DEMAND TRENDS

In 2021-22, a total of 8,051,013 grams of Ig was issued, representing an increase of 520,702 grams (6.9 per cent) over 2020-21. 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.

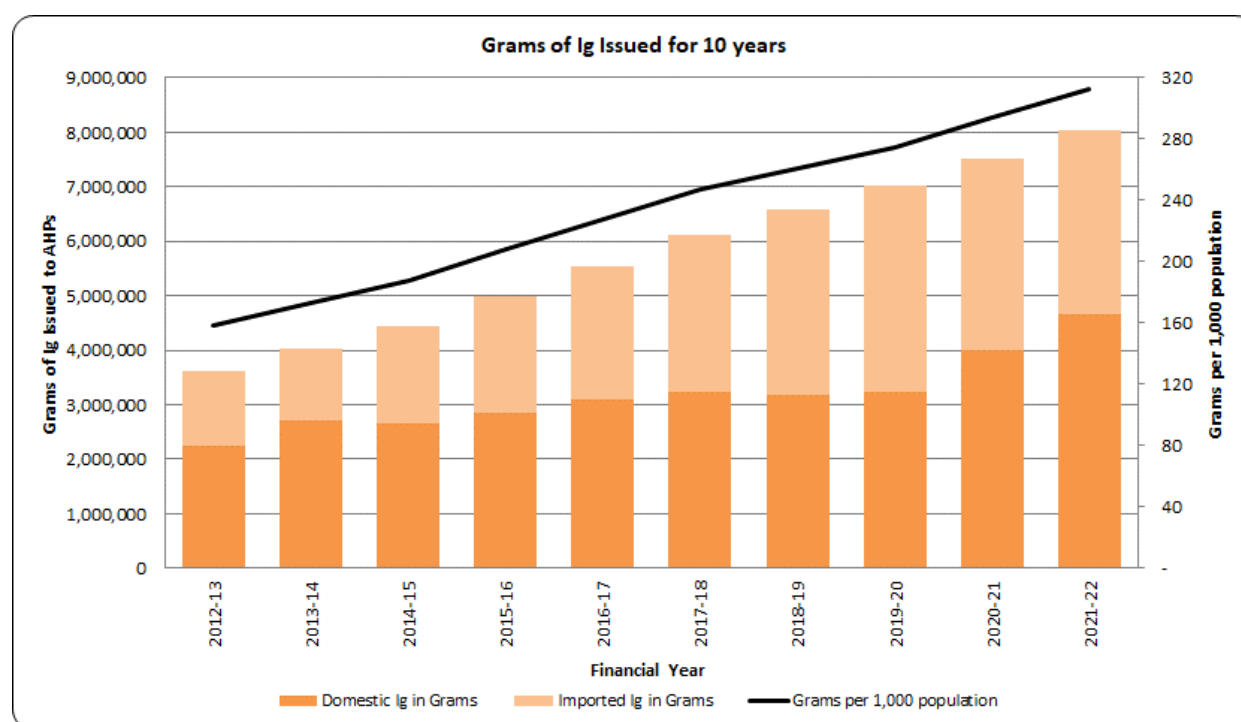


Figure 3: Ten-year trend in issues of Ig

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 over the past ten years at an average of 12 per cent.

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

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
2011-12	11%	7%	16%	9%	6%	1%	47%	17%	<b>11%</b>
2012-13	11%	13%	11%	9%	7%	-6%	21%	12%	<b>11%</b>
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%	7%
2021-22	5%	9%	3%	16%	18%	5%	33%	2%	7%
<b>Average last 10 years</b>	<b>10%</b>	<b>10%</b>	<b>9%</b>	<b>9%</b>	<b>12%</b>	<b>8%</b>	<b>12%</b>	<b>11%</b>	<b>9%</b>

## FINANCIAL TRENDS

Total expenditure on Ig (excluding plasma for fractionation) in 2021-22 was \$505.4 million, an increase of \$66.7 million (about 15 per cent) over 2020-21 (**Figure 4**). The increased expenditure predominately represents increases in demand and increasing imported Ig prices.

There also continues to be an 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.

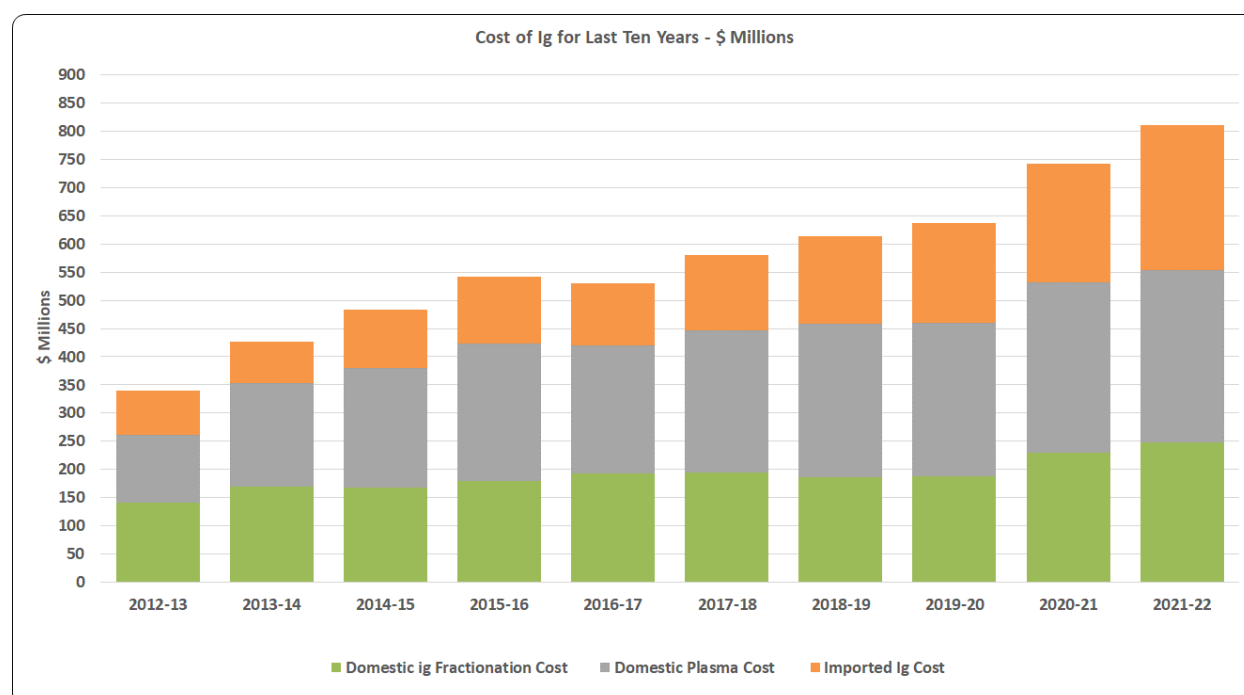
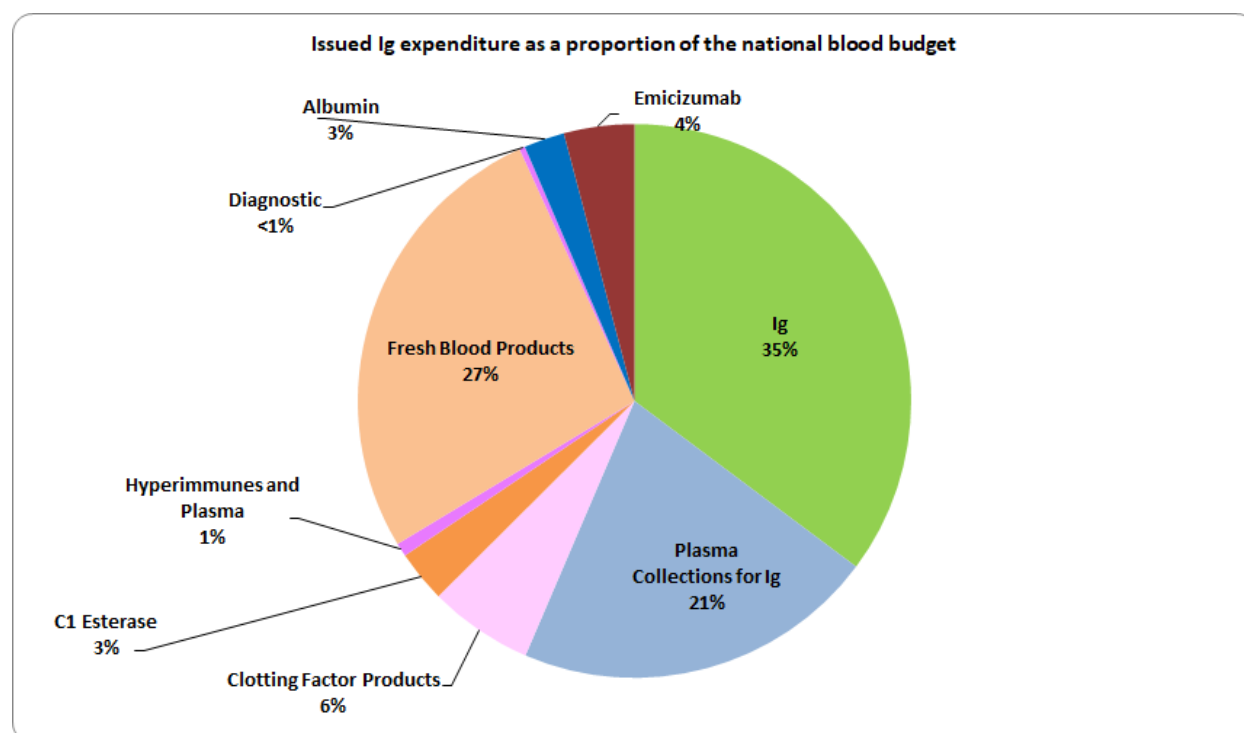


Figure 4: Ten-year trend in expenditure on Ig

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 35 per cent of the total budget for blood and blood products. Combined with expenditure for plasma for fractionation, Ig accounts for 56 per cent of the total blood budget, at a total expenditure of \$810.4 million (excluding specific hyperimmune plasma for fractionation).



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

Of the Ig supplied under national blood arrangements in Australia in 2021-22, 58 per cent was manufactured domestically and 42 per cent was imported from overseas (**Table 5**). This represents a 3.4 per cent decrease in product importation from 2020-21. Domestic supply is driven by the amount of plasma for fractionation collected in Australia, and this decreased by 5.4 per cent in 2021-22 over 2020-21. Intragam 10% (IVIg) and Evogam (SCIg) were Ig products manufactured domestically in 2021-22.

The imported products available were Privigen (IVIg), Flebogamma (IVIg), Gamunex (IVIg), Cuvitru (SCIg), Octagam (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 54 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 2021-22.

Table 5: Issues of domestic Ig compared with imported Ig

			NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Domestic Ig	Intragam 10	g	1,647,565	988,613	1,127,980	251,528	373,833	87,380	13,258	78,130	4,568,285
	Evogam	g	26,282	15,672	20,687	12,040	3,995	1,038	506	1,856	82,075
	Total Domestic	g	1,673,847	1,004,285	1,148,667	263,568	377,828	88,418	13,763	79,986	4,650,360
Imported Ig	Total Imported	g	1,129,140	775,879	827,693	172,523	282,992	87,640	23,233	101,554	3,400,653
Ig Cost excluding the cost of plasma for fractionation		\$(m)	\$174.8	\$112.3	\$123.9	\$27.1	\$41.6	\$11.3	\$2.5	\$11.9	\$505.4
Proportion of domestic to imported Ig		g%	57%	60%	56%	58%	60%	57%	50%	37%	44%

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	1,177,167	615,797	461,175	226,635	264,030	48,523	13,763	78,041	2,885,131
	Private	g	496,679	388,488	687,492	36,933	113,797	39,895	-	1,945	1,765,229
	<b>Total Domestic</b>	<b>g</b>	<b>1,673,847</b>	<b>1,004,285</b>	<b>1,148,667</b>	<b>263,568</b>	<b>377,828</b>	<b>88,418</b>	<b>13,763</b>	<b>79,986</b>	<b>4,650,360</b>
Imported Ig	Public	g	898,419	516,484	411,665	153,228	220,646	64,456	23,233	98,424	2,386,554
	Private	g	230,721	259,395	416,029	19,295	62,346	23,184	-	3,130	1,014,100
	<b>Total Imported</b>	<b>g</b>	<b>1,129,140</b>	<b>775,879</b>	<b>827,693</b>	<b>172,523</b>	<b>282,992</b>	<b>87,640</b>	<b>23,233</b>	<b>101,554</b>	<b>3,400,653</b>
Total Ig	Public	g	2,075,586	1,132,281	872,839	379,863	484,676	112,979	36,996	176,465	5,271,685
	Private	g	727,400	647,883	1,103,521	56,228	176,143	63,079	-	5,075	2,779,329
	<b>Total Ig</b>	<b>g</b>	<b>2,802,986</b>	<b>1,780,164</b>	<b>1,976,360</b>	<b>436,091</b>	<b>660,819</b>	<b>176,058</b>	<b>36,996</b>	<b>181,540</b>	<b>8,051,013</b>
Ig as portion of National	Public	g%	39%	21%	17%	7%	9%	2%	1%	3%	100%
	Private	g%	26%	23%	40%	2%	6%	2%	0%	0%	100%
	<b>Total Ig</b>	<b>g%</b>	<b>35%</b>	<b>22%</b>	<b>25%</b>	<b>5%</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		256.4	172.6	165.8	210.3	175.5	198.3	148.4	389.3	204.6
	Private		89.9	98.8	209.6	31.1	63.8	110.7	-	11.2	107.9
	<b>Total Ig</b>		<b>346.2</b>	<b>271.4</b>	<b>375.4</b>	<b>241.4</b>	<b>239.2</b>	<b>309.0</b>	<b>148.4</b>	<b>400.5</b>	<b>312.5</b>

Note: Excludes Norfolk Island



# Patient demographics

## PATIENT NUMBERS

A total of 23,187 patients were dispensed Ig under the national blood arrangements during 2021-22 and 8,095 were new patients. This represents about a 9 per cent increase in the number of patients since 2020-21 compared to about a 3 per cent increase in 2020-21 over 2019-20. A summary of new and total patient numbers is provided in **Figure 6**.

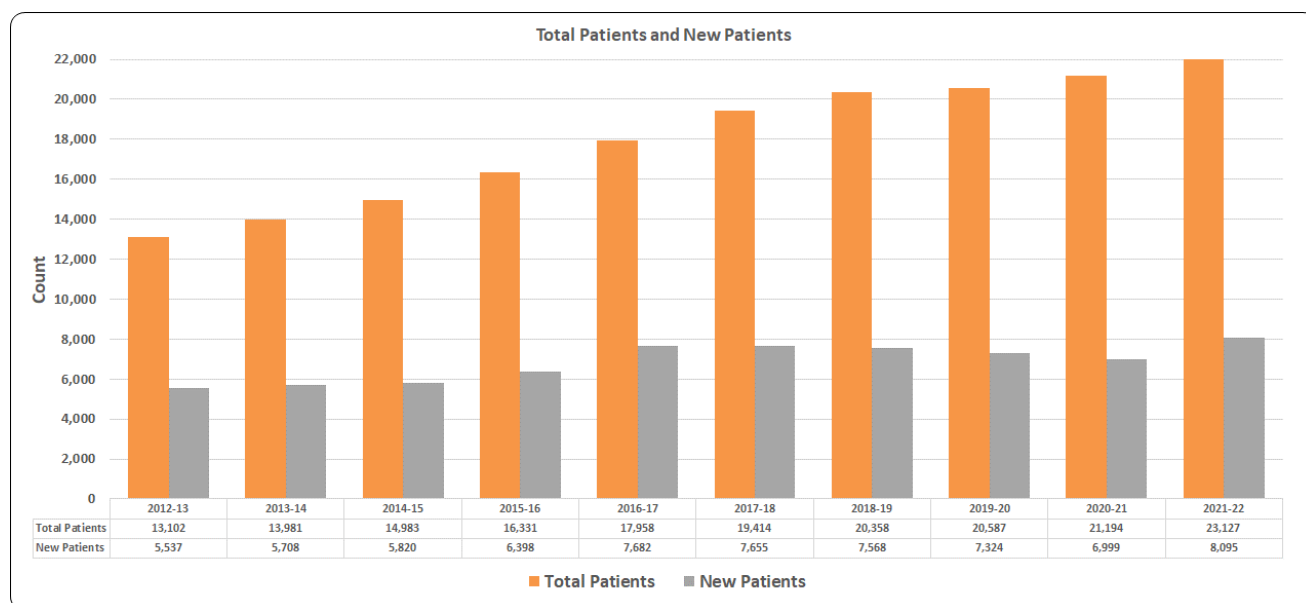


Figure 6: New and total patients for the last 10 years

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.

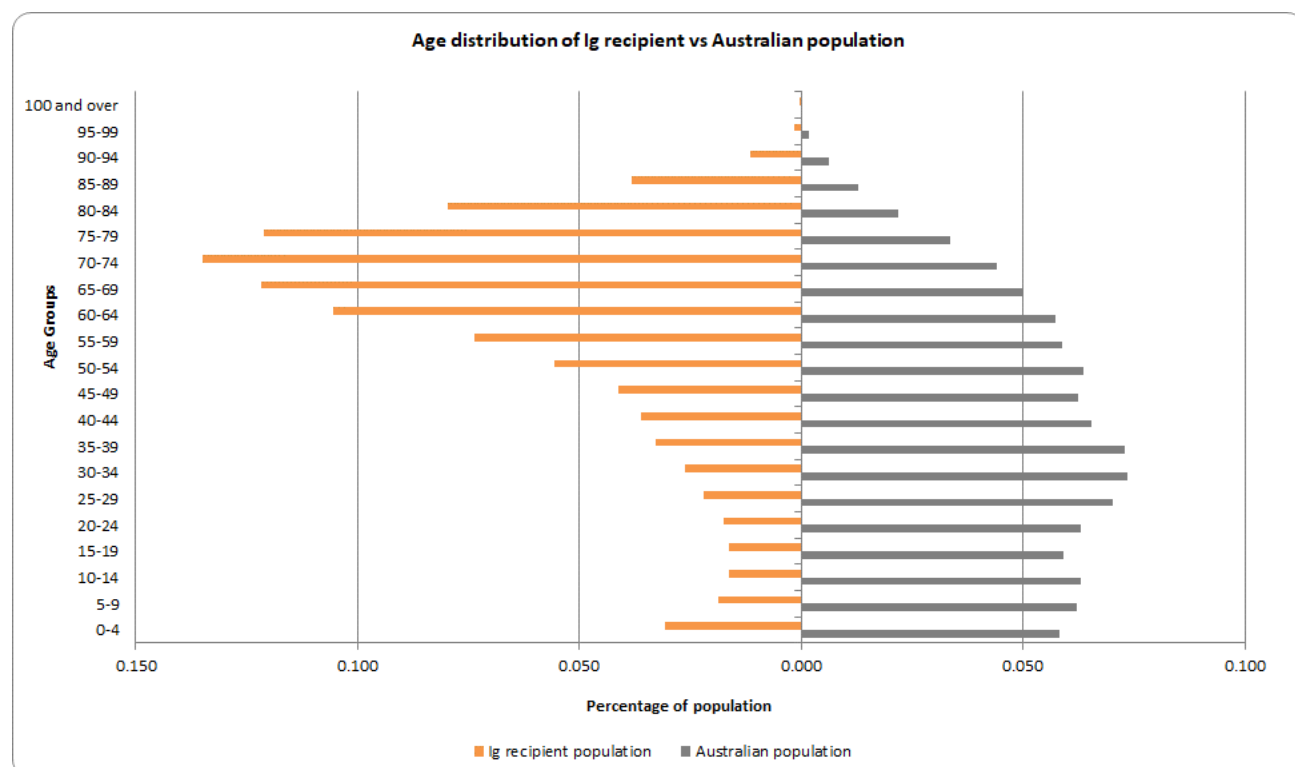
Table 7: Patient numbers by state and territory

2020-21	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Patient Counts	7,772	4,727	5,246	1,212	1,443	474	106	481	21,194
New Patients	2,656	1,635	1,442	451	517	149	41	156	6,999
<b>Population</b>	<b>8,084,192</b>	<b>6,563,465</b>	<b>5,191,354</b>	<b>1,796,955</b>	<b>2,731,729</b>	<b>565,557</b>	<b>249,163</b>	<b>451,431</b>	<b>25,633,846</b>
Proportion of Population	31.5%	25.6%	20.3%	7.0%	10.7%	2.2%	1.0%	1.8%	100.0%
Patients per 1,000 Population	0.96	0.72	1.01	0.67	0.53	0.84	0.43	1.07	0.83
<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
<b>Population</b>	<b>8,095,430</b>	<b>6,559,941</b>	<b>5,265,043</b>	<b>1,806,599</b>	<b>2,762,234</b>	<b>569,827</b>	<b>249,345</b>	<b>453,324</b>	<b>25,761,743</b>
Proportion of Population	31.4%	25.5%	20.4%	7.0%	10.7%	2.2%	1.0%	1.8%	100.0%
Patients per 1,000 Population	1.03	0.80	1.05	0.79	0.65	0.87	0.55	1.15	0.90
<b>% Change in Patients</b>	<b>6.9%</b>	<b>11.0%</b>	<b>5.8%</b>	<b>17.7%</b>	<b>24.4%</b>	<b>4.4%</b>	<b>30.2%</b>	<b>8.1%</b>	<b>9.1%</b>
<b>% Change in New Patients</b>	<b>9.9%</b>	<b>22.9%</b>	<b>8.0%</b>	<b>32.8%</b>	<b>35.2%</b>	<b>-10.7%</b>	<b>73.2%</b>	<b>1.3%</b>	<b>15.7%</b>

## 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 2021.<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 2021-22 patients.*

**Figure 7** compares the age of Ig recipients in Australia in 2021-22 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.

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.

<sup>1</sup> ABS 3101

<sup>2</sup> World Health Organization, [Ageing and health \(who.int\)](https://www.who.int/news-room/fact-sheets/detail/ageing-and-health)

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 2021-22.

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

Age Range	Patient Counts	Average Weight (kg)	Treatment Episodes	Grams Dispensed
0-4	709	14	2,623	24,780
5-9	430	27	3,014	38,698
10-14	374	47	3,215	74,058
15-17	222	61	2,525	65,735
18-19	151	66	1,560	40,487
20-29	911	74	9,911	279,696
30-39	1,361	79	15,181	461,129
40-49	1,791	82	22,322	735,164
50-59	2,983	83	36,224	1,177,810
60-69	5,253	82	63,109	1,967,105
70-79	5,916	79	68,569	2,100,535
80-89	2,720	75	29,196	834,428
90 or more	306	69	2,816	71,176
<b>Total</b>	<b>23,127</b>	<b>78</b>	<b>260,265</b>	<b>7,870,800</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	2017-18	2018-19	2019-20	2020-21	2021-22
Has an established therapeutic role	5,081,838	5,406,598	5,760,834	6,143,262	6,465,105
Has an emerging therapeutic role	721,766	792,821	908,889	1,046,454	1,142,519
Has application in exceptional circumstances only	271,817	246,231	181,777	220,762	261,544
Use is not supported	288	453	1,890	1,888	1,633
Other	25				
<b>Total</b>	<b>6,075,733</b>	<b>6,446,102</b>	<b>6,853,389</b>	<b>7,412,365</b>	<b>7,870,800</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* and *Other* 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 otherwise mentioned in the Criteria. Data to support compliance with all aspects of qualifying criteria for each specific condition were not always collected in STARS.

## 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 particular 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 2017-18, there has been a 31 per cent increase in Ig issues for neurological conditions, as compared with a 29 per cent increase for haematological conditions and a 31 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 2021-22.

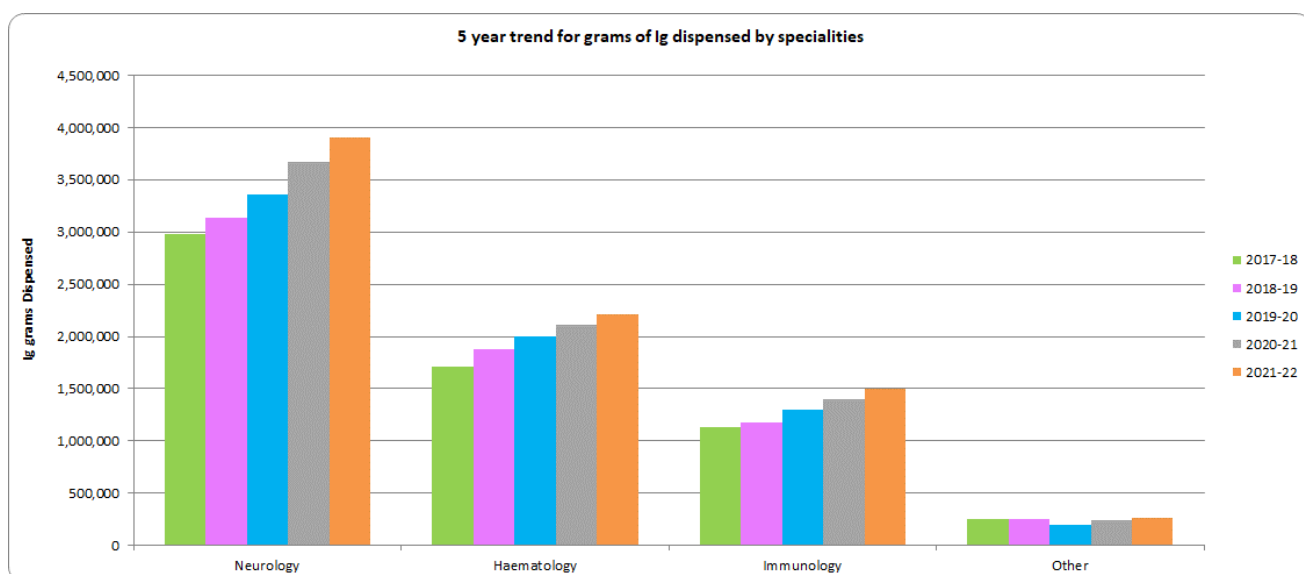


Figure 8: Grams of Ig dispensed by speciality

The data also illustrate the variation between states and territories in the relative amount of Ig used per patient for the same speciality. For example, about 37 per cent of WA's Ig patients are haematology patients, using 21 per cent of the state's total Ig issue in 2021-22. 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 2021-22

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Dermatology*	13,498	20,760	12,678	6,315	8,070	1,820	-	1,585	64,725
Haematology	679,706	471,480	655,484	167,676	131,541	69,436	8,316	26,549	2,210,189
Immunology	576,480	323,686	327,067	71,764	123,901	21,898	3,957	44,675	1,493,426
Neurology	1,410,524	801,753	951,010	174,133	370,825	70,374	21,785	104,755	3,905,158
Transplant Medicine*	20,883	127,693	17,400	8,520	7,943	11,695	2,315	855	197,303
<b>Total</b>	<b>2,701,090</b>	<b>1,745,372</b>	<b>1,963,638</b>	<b>428,408</b>	<b>642,279</b>	<b>175,223</b>	<b>36,373</b>	<b>178,419</b>	<b>7,870,800</b>

\*Included as Other in Figure 8

Table 11: Patients dispensed Ig by speciality and state and territory for 2021-22

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Dermatology*	18	32	22	5	12	<5	-	<5	<99
Haematology	3,057	2,056	2,406	735	660	242	41	131	9,216
Immunology	2,070	1,141	1,092	261	447	78	24	150	5,178
Neurology	3,066	1,729	1,997	390	647	154	59	231	8,123
Transplant Medicine*	150	317	60	40	41	20	14	7	644
<b>Total</b>	<b>8,311</b>	<b>5,245</b>	<b>5,551</b>	<b>1,427</b>	<b>1,795</b>	<b>495</b>	<b>138</b>	<b>520</b>	<b>23,127</b>

\*Included as Other in Figure 8

Table 12: New patients dispensed Ig by speciality and state and territory for 2021-22

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Dermatology*	8	9	5	<5	<5	-	-	-	<32
Haematology	1,275	851	689	336	302	59	20	49	3,569
Immunology	537	387	294	75	130	15	9	35	1,473
Neurology	1,016	638	546	170	241	51	32	71	2,739
Transplant Medicine*	100	136	32	20	24	8	10	<5	331
<b>Total</b>	<b>2,918</b>	<b>2,010</b>	<b>1,557</b>	<b>599</b>	<b>&lt;702</b>	<b>133</b>	<b>71</b>	<b>&lt;160</b>	<b>8,095</b>

\*Included as Other in Figure 8

## IG DISPENSES BY MEDICAL CONDITION

The top 10 medical conditions account for about 88 per cent of all Ig supplied, with the top 3 medical conditions accounting for 55 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 2021-22 (23 per cent), closely followed by chronic inflammatory demyelinating polyneuropathy (CIDP) (22 per cent). Primary immunodeficiency diseases (PID) with antibody deficiency accounted for around 10 per cent of total Ig use.

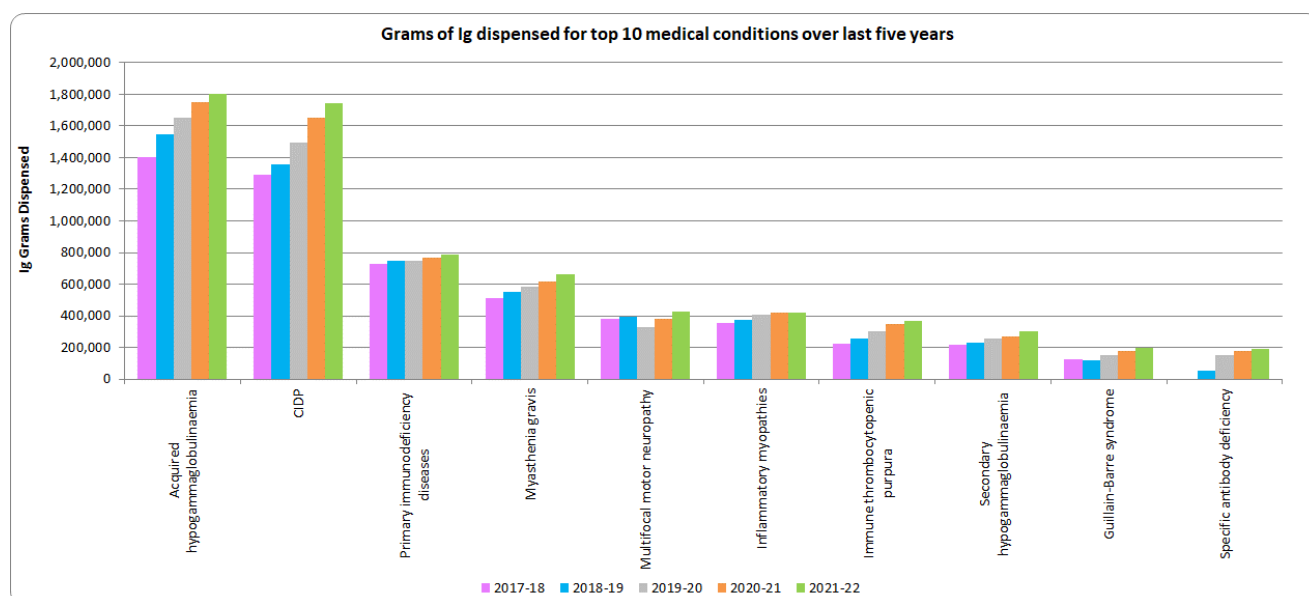


Figure 9: Grams of Ig dispensed by top 10 medical conditions

The top 10 medical conditions by state and territory for 2021-22 is presented in **Table 13**.

**Table 13: Grams dispensed by state and territory and medical condition for 2021-22**

Specialities	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Acquired hypogammaglobulinaemia	542,856	378,955	554,834	125,999	106,649	63,184	5,371	23,184	1,801,031
CIDP	684,257	340,553	433,281	54,458	145,647	37,494	7,460	40,524	1,743,672
Primary immunodeficiency diseases	344,254	153,105	153,468	43,337	50,576	10,866	2,530	26,689	784,823
Myasthenia gravis	198,970	163,203	176,342	17,628	80,688	8,178	2,055	14,218	661,279
Inflammatory myopathies	122,387	95,798	101,475	35,418	56,330	3,748	3,548	9,938	428,639
Multifocal motor neuropathy	141,659	80,740	83,613	37,208	43,150	7,868	4,320	20,307	418,863
Secondary hypogammaglobulinaemia	138,132	70,792	113,637	7,541	21,620	9,389	446	8,022	369,579
Immune thrombocytopenic purpura	99,868	68,775	77,610	30,275	16,638	5,503	2,145	1,673	302,485
Solid organ transplantation	20,883	127,693	17,400	8,520	7,943	11,695	2,315	855	197,303
AMAE	85,449	28,060	48,735	5,725	12,885	3,245	900	6,510	191,509
<b>Total</b>	<b>2,378,712</b>	<b>1,507,672</b>	<b>1,760,394</b>	<b>366,108</b>	<b>542,124</b>	<b>161,168</b>	<b>31,089</b>	<b>151,917</b>	<b>6,899,182</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 2021-22 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/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. Further work will be undertaken to support supply of SCIg for other pathways of care.

In 2021-22, 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 2021-22. **Tables 16-17** show the patient numbers, grams dispensed, by medical condition and by state and territory in 2021-22.

**Table 14: Patients dispensed by SCIg/IVIg, medical conditions and product for 2021-22**

Medical Condition	IVIg						SCIg			Total
	Flebogamma 5%	Flebogamma 10%	Gamunex 10%	Intragam 10	Octagam 10%	Privigen 10%	Cuvitru	Evogam	Hizentra	
Acquired-hypogammaglobulinaemia	41	33	115	5,433	11	899	143	52	550	<b>7,004</b>
Chronic inflammatory demyelinating polyneuropathy	96	92	32	1,612	119	1,050	29	<5	152	<b>2,992</b>
Primary immunodeficiency diseases	29	6	<5	1,438	23	58	86	232	568	<b>2,265</b>
Secondary hypogammaglobulinaemia	24	26	67	917	52	192	50	36	193	<b>1,468</b>
Specific antibody deficiency	6	<5	<5	273	30	26	25	33	100	<b>460</b>

Note: Excludes NHlg



Table 15: Grams dispensed by SCIg/IVIg, medical conditions and product for 2021-22

Medical Condition	IVIg		SCIg			Total
	Imported IVIg	Intragam 10	Imported SCIg	Evogam	Hizentra	
Acquired-hypogammaglobulinaemia	306,481	1,279,688	20,090	11,598	183,175	<b>1,801,031</b>
Chronic inflammatory demyelinating polyneuropathy	789,155	826,125	7,065	186	121,142	<b>1,743,672</b>
Primary immunodeficiency diseases	36,247	482,508	12,985	51,518	201,085	<b>784,823</b>
Secondary hypogammaglobulinaemia	74,269	222,570	6,979	7,200	58,561	<b>369,579</b>
Specific antibody deficiency	15,630	82,078	2,721	8,095	32,118	<b>140,642</b>

Note: Excludes NHlg

Table 16: Patients dispensed by SCIg medical conditions, and state and territory for 2021-22

Products	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Acquired-hypogammaglobulinaemia	210	190	135	81	100	26	<5	13	<b>739</b>
Chronic inflammatory demyelinating polyneuropathy	54	46	44	<5	22	8	<5	9	<b>180</b>
Primary immunodeficiency diseases	338	201	178	70	63	11	<5	32	<b>876</b>
Secondary hypogammaglobulinaemia	92	40	99	11	23	7	<5	<5	<b>&lt;285</b>
Specific antibody deficiency	59	28	21	15	26	<5	<5	5	<b>154</b>

Table 17: Grams dispensed by SCIg medical conditions, and state and territory for 2021-22

Products	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Acquired-hypogammaglobulinaemia	63,356	54,842	37,492	20,951	25,926	9,203	63	3,029	<b>214,863</b>
Chronic inflammatory demyelinating polyneuropathy	33,065	33,145	33,018	918	15,047	6,064	1,080	6,056	<b>128,393</b>
Primary immunodeficiency diseases	100,750	59,136	60,760	16,942	13,548	3,806	1,080	9,567	<b>265,588</b>
Secondary hypogammaglobulinaemia	25,472	8,265	29,222	3,356	3,840	1,779	56	749	<b>72,740</b>
Specific antibody deficiency	17,186	7,714	6,597	3,617	5,548	260	179	1,832	<b>42,934</b>

## Ig Issued – NHlg

In 2013-14, due to the introduction of SCIg as discussed above, demand for NHlg reduced significantly by 19 per cent. 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 further declined in 2014-15 by 78 per cent because of implementation of the NHlg policy outlining the national position on access and use under the national blood arrangements.

**Figure 10** shows the grams issued and the grams issued per 1,000 population by states and territories for either purpose listed above.

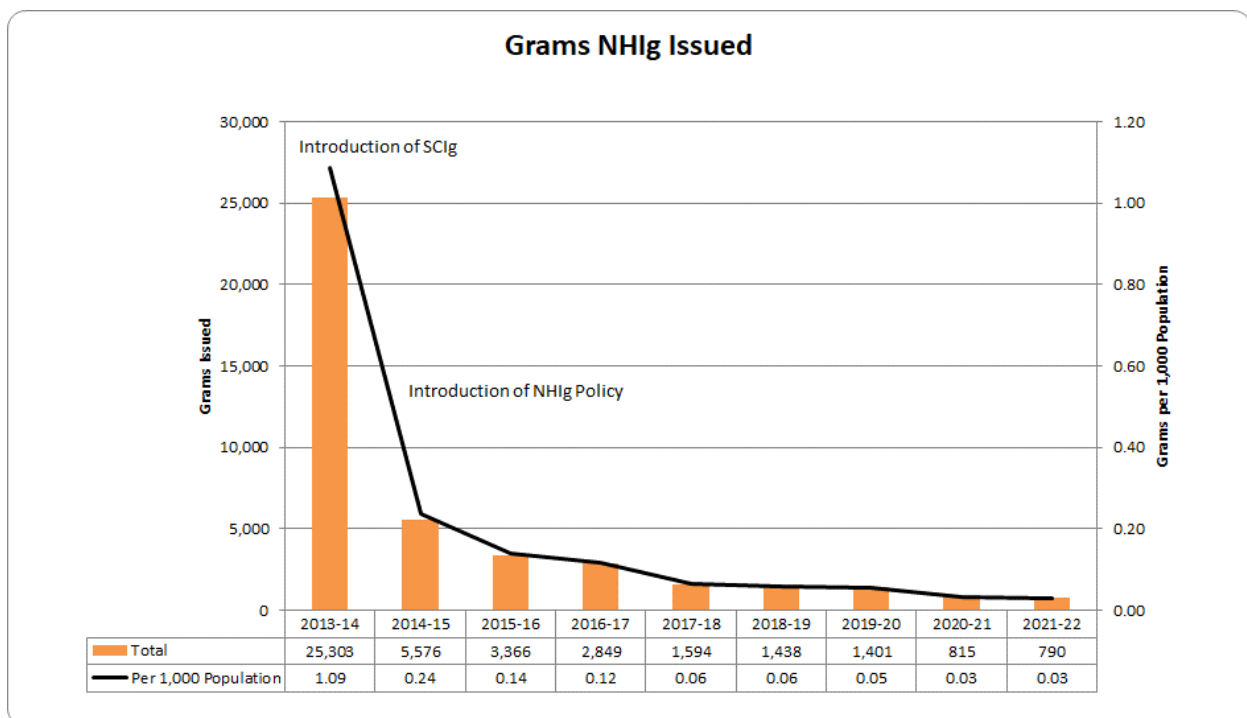


Figure 10: NHlg grams issued and grams issued per 1,000 population

# 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 two 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 jurisdictional direct order (JDO) arrangements, or directly from suppliers on a commercial basis, at private expense.

Under JDO 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 JDO 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 JDO is usually borne directly by the AHP.

### 2021-22 Activities

The history of NBA activities prior to 2021-22 can be found in previous *National Report on the Issues and Use of Immunoglobulin (Ig) – Annual Reports*.

The NBA Ig Governance Program continued its work throughout **2021-22** 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 2021–22 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,
- 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, and
- advise and support clinical staff by reporting on Ig usage and responding to enquiries relating to access to Ig.

Working towards further improvements, the Ig Governance Program also:

- assisted in the development of enhancements to BloodSTAR to further streamline access to Ig by making the system easier for clinicians to use, and
- began a review of the National SCIg Program with the aim of identifying options to overcome current barriers to program uptake and inform the future direction of the program. HealthConsult has been engaged to undertake the review, with outcomes expected in mid-2023.

As reported in the NBA's 2020-21 Annual Report, PricewaterhouseCoopers completed an evaluation of the impact of the Ig Governance Program in May 2021, which showed that:

- since the implementation of the Ig Governance Program, the rate of growth in Ig usage had decreased from almost 11 per cent annually to 7.3 per cent. The rate of growth in 2021-22 was 6.9 per cent, consistent with this trend,
- there is a correlation between key components of the Ig Governance Program and decreasing use of Ig, most notably following the introduction of Version 3 of the Criteria (2018) and BloodSTAR,
- the reduced growth in Ig demand translates to an estimated \$90 million saving in Ig product expenditure between 2018-19 and 2020-21. It is predicted that this trend will continue, with savings expected to grow to an estimated \$2.2 billion over the decade to 2030-31, and
- no major changes were observed in the use of Ig for the 10 most treated medical conditions, and there had been no reduction in the doses administered. This indicates that the reduced rate of growth in Ig usage has been achieved through more targeted access to Ig, not through ceasing or limiting access to Ig for patients who need it.

In 2021-22, the Ig Governance team progressed the recommendations from the report. 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>.

## 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
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 (previous 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 immunoglobulin</b>	An immunoglobulin 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 immunoglobulin 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 1 dose of transfused product every two 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 neuronopathy	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
Cicatricial pemphigoid (CP)	Cicatricial 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-mycoclonus ataxia	Opsoclonus-mycoclonus 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 2021-22

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Has an established therapeutic role										
Acute leukaemia	Patients	162	121	56	26	41	5	<5	<5	404
	Average Age	39	45	51	25	48	52	48	15	42
	Average Weight	66	71	70	49	81	74	109	56	68
	Grams	18,462	17,888	11,258	2,453	5,060	1,263	480	318	57,182
	Grams/Episode	20	21	22	11	20	19	40	14	20
	Grams per 1,0001,000 Population	2	3	2	1	2	2	2	1	2
Chronic Immune thrombocytopenic purpura (ITP)	Patients	164	126	120	31	47	6	<5	6	<505
	Average Age	59	66	58	64	57	40	26	67	60
	Average Weight	80	78	83	79	83	80	50	77	80
	Grams	31,118	24,190	27,308	3,670	7,510	1,058	100	605	95,558
	Grams/Episode	47	50	35	46	62	44	50	50	44
	Grams per 1,000 Population	4	4	5	2	3	2	0	1	4
Chronic inflammatory demyelinating polyneuropathy (CIDP)	Patients	1,198	579	767	181	103	63	21	79	2,927
	Average Age	65	64	62	63	63	62	55	59	63
	Average Weight	83	84	85	85	84	88	89	87	84
	Grams	672,144	337,421	421,776	144,925	53,448	35,812	7,460	39,924	1,712,907
	Grams/Episode	46	42	30	46	43	29	59	51	40
	Grams per 1,000 Population	83	51	80	80	19	63	30	88	66
Chronic lymphocytic leukaemia (CLL)	Patients	573	372	436	121	127	57	6	30	1,696
	Average Age	74	74	74	71	72	74	66	73	73
	Average Weight	77	79	79	76	83	82	90	81	78
	Grams	154,106	105,624	132,499	28,860	31,929	18,399	2,130	7,728	481,274
	Grams/Episode	28	25	23	19	22	25	34	24	25
	Grams per 1,000 Population	19	16	25	16	12	32	9	17	19
Combined immunodeficiency generally less profound than SCID (e.g. thymoma)	Patients	18	18	8	5	<5		<5		<59
	Average Age	52	32	38	68	14		4		42
	Average Weight	65	50	59	74	42		19		58

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Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	5,318	3,445	3,207	1,708	481		100		14,260
	Grams/Episode	20	16	24	33	13		8		20
	Grams per 1,000 Population	1	1	1	1	0		0		1
Combined immunodeficiency with associated or syndromal features (e.g. Wiskott Aldrich syndrome; ataxia telangiectasia)	Patients	12	10	15	6	<5		<5	<5	<58
	Average Age	22	31	18	15	7		16	31	20
	Average Weight	53	62	43	36	25		33	62	46
	Grams	3,017	2,400	2,975	1,173	350		208	535	10,657
	Grams/Episode	22	17	17	9	4		10	15	15
	Grams per 1,000 Population	0	0	1	1	0		1	1	0
Dermatomyositis (DM)	Patients	102	78	66	31	25	<5	<5	11	<323
	Average Age	51	49	56	57	46	47	69	47	52
	Average Weight	70	75	80	74	82	78	55	69	75
	Grams	38,561	32,555	28,888	16,110	11,545	1,135	350	4,313	133,456
	Grams/Episode	36	46	24	40	45	27	27	41	35
	Grams per 1,000 Population	5	5	5	9	4	2	1	10	5
Evans syndrome - with significant Immune thrombocytopenic purpura (ITP) - adult	Patients	<5	5	5		<5	<5			<25
	Average Age	45	65	40		69	36			46
	Average Weight	119	86	92		72	147			93
	Grams	510	810	1,413		200	400			3,333
	Grams/Episode	57	68	24		25	200			37
	Grams per 1,000 Population	0	0	0		0	1			0
Fetal alloimmune thrombocytopenia (FAIT)	Patients	<5	<5	<5	<5					<20
	Average Age	32	34	37	28					34
	Average Weight	73	93	65	64					86
	Grams	2,395	5,990	280	585					9,250
	Grams/Episode	73	55	25	65					57
	Grams per 1,000 Population	0	1	0	0					0
Guillain-Barré Syndrome (GBS)	Patients	223	163	121	68	33	16	<5	12	<641
	Average Age	56	55	55	57	60	68	61	68	56
	Average Weight	79	82	82	81	77	81	64	83	81

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Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	34,360	25,470	19,800	10,338	5,030	3,060	530	2,093	100,680
	Grams/Episode	34	42	22	33	36	20	38	72	32
	Grams per 1,000	4	4	4	6	2	5	2	5	4
Guillain–Barré Syndrome (GBS) variants	Patients	102	56	35	17	15	<5	<5	<5	<240
	Average Age	58	52	49	48	49	42	43	66	53
	Average Weight	78	75	80	79	80	82	83	102	78
	Grams	14,605	8,593	5,035	2,265	2,043	618	438	528	34,123
	Grams/Episode	34	43	26	33	31	44	40	53	35
	Grams per 1,000 Population	2	1	1	1	1	1	2	1	1
IgA paraproteinaemic demyelinating neuropathy	Patients	8	<5	7	<5					<25
	Average Age	77	73	69	44					70
	Average Weight	84	65	96	56					90
	Grams	2,590	520	6,815	225					10,150
	Grams/Episode	38	40	38	28					38
	Grams per 1,000 Population	0	0	1	0					0
IgG paraproteinaemic demyelinating neuropathy	Patients	22	6	14	2	<5	<5		<5	<57
	Average Age	75	78	71	57	63	81		67	73
	Average Weight	76	76	75	75	90	84		76	77
	Grams	9,523	2,613	4,690	498	1,010	1,683		600	20,615
	Grams/Episode	36	43	32	19	44	34		30	35
	Grams per 1,000 Population	1	0	1	0	0	3		1	1
Inclusion Body Myositis (IBM)	Patients	33	46	34	<5	13	<5		6	<142
	Average Age	74	74	71	75	74	77		72	73
	Average Weight	81	81	84	68	75	65		88	81
	Grams	13,256	23,475	18,628	1,208	4,985	868		2,835	65,253
	Grams/Episode	35	45	29	42	33	26		35	36
	Grams per 1,000 Population	2	4	4	1	2	2		6	3
Kawasaki disease	Patients	190	161	92	43	39	8	<5	7	<545
	Average Age	8	5	4	4	4	5	5	14	6
	Average Weight	26	22	22	20	22	22	18	37	23

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	9,775	8,365	4,468	2,020	1,910	448	145	475	27,605
	Grams/Episode	33	36	18	34	29	45	36	59	30
	Grams per 1,000 Population	1	1	1	1	1	1	1	1	1
Lambert–Eaton myasthenic syndrome	Patients	11	7	10	<5	<5			<5	<43
	Average Age	66	70	59	80	63			77	63
	Average Weight	67	85	73	66	91			64	75
	Grams	5,225	3,778	4,328	-	1,205			710	15,245
	Grams/Episode	40	48	20	-	28			51	31
	Grams per 1,000 Population	1	1	1		0			2	1
Lymphoproliferative syndromes (e.g. XLP1, XLP2, CD27 def)	Patients	<5	<5	<5	<5	<5	<5			<30
	Average Age	41	30	1	14	18	45			33
	Average Weight	67	85	10	40	54	75			67
	Grams	1,153	480	20	13	163	288			2,116
	Grams/Episode	27	22	5	3	13	24			22
	Grams per 1,000 Population	0	0	0	0	0	1			0
Memory B cell deficiency secondary to haemopoietic stem cell transplantation (HSCT)	Patients	132	63	124	16	41	9	<5	6	387
	Average Age	51	53	56	55	53	57	67	46	54
	Average Weight	73	73	72	68	74	82	79	61	72
	Grams	26,481	13,002	31,866	2,867	8,432	3,083	320	1,340	87,390
	Grams/Episode	25	21	21	20	21	28	32	16	22
	Grams per 1,000 Population	3	2	6	2	3	5	1	3	3
Multifocal motor neuropathy with or without persistent conduction block	Patients	209	112	133	47	42	13	<5	20	569
	Average Age	58	58	59	60	61	64	51	56	59
	Average Weight	79	83	81	80	85	83	75	88	81
	Grams	141,659	80,740	83,613	43,150	37,208	7,868	4,320	20,307	418,863
	Grams/Episode	48	50	30	49	56	30	66	67	44
	Grams per 1,000 Population	17	12	16	24	13	14	17	45	16
Multiple myeloma (MM)	Patients	647	454	541	139	141	54	<5	27	1,985
	Average Age	72	69	71	69	70	69	63	72	71
	Average Weight	77	80	79	81	83	82	95	74	79

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	150,885	109,845	152,045	31,505	36,871	17,680	150	4,934	503,914
	Grams/Episode	27	24	23	15	20	23	38	23	23
	Grams per 1,000 Population	19	17	29	17	13	31	1	11	20
Myasthenia gravis (MG)	Patients	459	359	376	163	51	21	7	39	1,445
	Average Age	63	63	63	62	63	60	47	59	63
	Average Weight	81	83	84	79	84	80	85	82	82
	Grams	198,970	163,203	176,342	80,688	17,628	8,178	2,055	14,218	661,279
	Grams/Episode	37	40	24	37	37	20	41	39	32
	Grams per 1,000 Population	25	25	33	45	6	14	8	31	26
Necrotising autoimmune myopathy (NAM)	Patients	74	56	63	46	23	<5	5	<5	<277
	Average Age	66	64	67	59	65	45	50	53	64
	Average Weight	78	77	82	84	78	106	76	59	80
	Grams	27,891	28,645	25,298	25,705	12,873	1,960	3,135	275	125,781
	Grams/Episode	36	50	22	42	45	35	48	16	36
	Grams per 1,000 Population	3	4	5	14	5	3	13	1	5
Neonatal alloimmune thrombocytopenia (NAIT)	Patients	8	8	<5	5	<5		<5	<5	<41
	Average Age	-	-	-	31	-		36	-	16
	Average Weight	3	3	2	64	3		117	3	39
	Grams	38	40	8	1,758	15		800	8	2,665
	Grams/Episode	3	3	3	63	3		100	3	37
	Grams per 1,000 Population	0	0	0	1	0		3	0	0
Neonate with haemochromatosis	Patients		<5	<5						<10
	Average Age		-	-						-
	Average Weight		3	3						3
	Grams		10	13						23
	Grams/Episode		3	4						3
	Grams per 1,000 Population		0	0						0
Newly Diagnosed Immune thrombocytopenic purpura (ITP)	Patients	297	234	206	72	116	20	11	9	965
	Average Age	60	60	62	62	64	60	52	61	61
	Average Weight	77	76	82	80	85	88	86	78	80

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Grams	38,960	26,220	29,038	9,060	15,395	2,843	1,563	1,043	124,120
	Grams/Episode	56	60	37	65	67	26	82	61	51
	Grams per 1,000 Population	5	4	6	5	6	5	6	2	5
Non-Hodgkin lymphoma (NHL)	Patients	630	444	665	151	165	76	13	35	2,135
	Average Age	71	68	70	68	69	70	61	68	70
	Average Weight	76	78	78	79	80	81	79	72	78
	Grams	157,632	115,232	195,264	35,263	40,823	20,228	2,176	6,718	573,333
	Grams/Episode	27	24	23	18	22	23	28	21	24
	Grams per 1,000 Population	19	18	37	20	15	35	9	15	22
Other Haematological malignancy	Patients	180	74	118	31	13	10	<5	6	<437
	Average Age	67	62	70	60	57	65	48	74	66
	Average Weight	75	77	74	78	74	87	70	88	76
	Grams	35,291	17,365	31,902	5,702	2,884	2,533	115	2,148	97,937
	Grams/Episode	27	21	21	16	24	19	29	35	23
	Grams per 1,000 Population	4	3	6	3	1	4	0	5	4
Persistent Immune thrombocytopenic purpura (ITP)	Patients	141	112	86	34	43	8	<5	<5	<434
	Average Age	60	60	57	58	56	45	51	66	58
	Average Weight	78	78	83	82	98	142	74	60	83
	Grams	29,280	17,555	19,853	3,908	7,170	1,203	483	25	79,475
	Grams/Episode	51	56	34	60	66	25	48	25	47
	Grams per 1,000 Population	4	3	4	2	3	2	2	0	3
Polymyositis (PM)	Patients	141	73	100	26	22	<5	<5	18	<390
	Average Age	62	62	61	55	68	81	74	62	62
	Average Weight	77	76	81	80	82	65	77	77	79
	Grams	55,935	34,598	47,290	14,515	11,000	653	63	5,350	169,403
	Grams/Episode	35	46	26	44	43	26	63	39	35
	Grams per 1,000 Population	7	5	9	8	4	1	0	12	7
Possible Common variable immune deficiency (CVID) -	Patients	442	151	125	45	32	6	<5	30	818
	Average Age	60	47	57	42	58	48	24	50	55
	Average Weight	77	70	76	66	74	86	51	81	75

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
below normal serum IgG but normal serum IgA level	Grams	147,578	47,233	45,839	12,991	9,027	2,082	382	10,460	275,591
	Grams/Episode	29	21	24	17	19	16	21	22	25
	Grams per 1,000 Population	18	7	9	7	3	4	2	23	11
Pregnant woman with previous fetal loss	Patients	<5	<5							<10
	Average Age	21	38							37
	Average Weight	60	61							61
	Grams	120	1,590							1,710
	Grams/Episode	60	61							61
	Grams per 1,000 Population	0	0							0
Severe combined immunodeficiency (SCID)	Patients	16	10	9	<5	<5				<45
	Average Age	17	28	23	39	25				23
	Average Weight	39	54	58	106	77				53
	Grams	3,429	3,112	3,755	120	648				11,064
	Grams/Episode	22	21	16	30	21				19
	Grams per 1,000 Population	0	0	1	0	0				0
Severe reduction in all Ig isotypes with decreased or absent B-cells (e.g. XLA def)	Patients	37	40	25	10	10		<5	<5	<132
	Average Age	32	35	29	16	21		18	45	29
	Average Weight	74	68	66	45	50		47	87	64
	Grams	15,579	14,388	7,775	3,022	2,816		672	749	45,000
	Grams/Episode	33	23	22	10	18		28	34	23
	Grams per 1,000 Population	2	2	1	2	1		3	2	2
Severe reduction in at least two Ig isotypes with low/normal B-cells (e.g. CVID)	Patients	466	215	232	93	80	21	<5	43	1,128
	Average Age	50	51	52	42	48	45	65	44	49
	Average Weight	74	76	75	74	70	81	76	77	75
	Grams	164,417	79,704	85,030	30,809	27,413	8,432	1,169	14,875	411,848
	Grams/Episode	29	23	24	18	25	21	39	28	25
	Grams per 1,000 Population	20	12	16	17	10	15	5	33	16
Severe reduction in serum IgG and IgA with	Patients	18	6	18	<5	6				<53
	Average Age	30	51	46	74	55				44
	Average Weight	45	79	61	77	70				61

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
normal/elevated IgM (e.g. CD40L def)	Grams	3,625	2,343	4,864	740	2,351				13,922
	Grams/Episode	18	26	14	32	31				19
	Grams per 1,000 Population	0	0	1	0	1				1
Stiff person syndrome	Patients	58	12	22	10	<5	5	<5	8	<125
	Average Age	61	50	62	66	57	53	54	49	60
	Average Weight	77	78	84	71	64	81	73	77	79
	Grams	33,748	5,843	15,918	6,093	915	2,695	220	2,330	67,760
	Grams/Episode	46	48	28	34	31	22	28	31	37
	Grams per 1,000 Population	4	1	3	3	0	5	1	5	3
Transient hypogammaglobulinaemia of infancy	Patients	<5		<5		<5	<5		<5	<25
	Average Age	2		1		2	5		1	2
	Average Weight	13		11		12	14		14	13
	Grams	139		3		90	64		70	366
	Grams/Episode	4		2		4	4		5	4
	Grams per 1,000 Population	0		0		0	0		0	0
<b>Total - Has an established therapeutic role</b>	<b>Patients</b>	<b>6,627</b>	<b>4,052</b>	<b>4,536</b>	<b>1,400</b>	<b>1,206</b>	<b>409</b>	<b>104</b>	<b>406</b>	<b>18,445</b>
	<b>Average Age</b>	<b>62</b>	<b>61</b>	<b>63</b>	<b>59</b>	<b>62</b>	<b>63</b>	<b>51</b>	<b>57</b>	<b>62</b>
	<b>Average Weight</b>	<b>78</b>	<b>78</b>	<b>80</b>	<b>77</b>	<b>79</b>	<b>83</b>	<b>77</b>	<b>80</b>	<b>79</b>
	<b>Grams</b>	<b>2,247,770</b>	<b>1,364,280</b>	<b>1,649,097</b>	<b>523,941</b>	<b>360,424</b>	<b>144,526</b>	<b>29,560</b>	<b>145,508</b>	<b>6,465,105</b>
	<b>Grams/Episode</b>	<b>35</b>	<b>33</b>	<b>26</b>	<b>29</b>	<b>30</b>	<b>25</b>	<b>44</b>	<b>36</b>	<b>31</b>
	<b>Grams per 1,000 Population</b>	<b>278</b>	<b>208</b>	<b>313</b>	<b>290</b>	<b>130</b>	<b>254</b>	<b>119</b>	<b>321</b>	<b>251</b>
<b>Has an emerging therapeutic role</b>										
Autoimmune haemolytic anaemia	Patients	42	34	38	6	9	<5			<139
	Average Age	58	72	69	54	62	21			65
	Average Weight	73	74	79	69	73	117			76
	Grams	7,118	5,355	6,690	1,350	1,278	100			21,890
	Grams/Episode	46	58	32	32	53	50			42
	Grams per 1,000 Population	1	1	1	1	0	0			1
Bullous Pemphigoid	Patients	6	11	16	5	<5			5	<48
	Average Age	78	62	63	68	78			70	66



OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	82	109	90	86	85			69	93
	Grams	3,160	13,570	14,305	6,135	3,990			2,445	43,605
	Grams/Episode	49	62	39	61	45			79	50
	Grams per 1,000 Population	0	2	3	3	1			5	2
Cicatricial pemphigoid (CP)	Patients	<5		11	<5					<21
	Average Age	67		68	82					71
	Average Weight	76		91	60					83
	Grams	3,265		6,498	2,288					12,050
	Grams/Episode	76		24	29					30
	Grams per 1,000 Population	0		1	1					0
Drug-induced pemphigus foliaceus	Patients					<5				<5
	Average Age					49				49
	Average Weight					125				125
	Grams					200				200
	Grams/Episode					29				29
	Grams per 1,000 Population					0				0
Encephalitis associated with antibodies to AMPA receptor	Patients	<5			<5					<10
	Average Age	54			51					53
	Average Weight	69			70					69
	Grams	553			135					688
	Grams/Episode	28			15					24
	Grams per 1,000 Population	0			0					0
Encephalitis associated with antibodies to CASPR2	Patients	10	<5	5	<5	<5	<5			<35
	Average Age	62	63	52	68	67	77			61
	Average Weight	81	88	73	73	82	92			79
	Grams	4,870	550	1,925	440	320	280			8,385
	Grams/Episode	39	50	29	31	32	28			36
	Grams per 1,000 Population	1	0	0	0	0	0			0
Encephalitis associated with antibodies to DPPX	Patients	<5		<5						<10
	Average Age	56		38						41

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	71		80						78
	Grams	350		670						1,020
	Grams/Episode	88		37						46
	Grams per 1,000 Population	0		0						0
Encephalitis associated with antibodies to GABA (A or B) receptor	Patients			<5						<5
	Average Age			54						54
	Average Weight			71						71
	Grams			295						295
	Grams/Episode			27						27
	Grams per 1,000 Population			0						0
Encephalitis associated with antibodies to glycine receptor	Patients			5						5
	Average Age			48						48
	Average Weight			78						78
	Grams			2,080						2,080
	Grams/Episode			17						17
	Grams per 1,000 Population			0						0
Encephalitis associated with antibodies to LGI1	Patients	12	9	5	<5	<5			<5	<41
	Average Age	64	64	55	81	74			72	63
	Average Weight	67	75	72	63	61			75	70
	Grams	3,578	2,573	1,175	340	120			30	7,815
	Grams/Episode	29	35	17	24	24			30	27
	Grams per 1,000 Population	0	0	0	0	0			0	0
Encephalitis associated with antibodies to NMDA receptor	Patients	28	9	24	<5	<5	<5	<5	6	<87
	Average Age	37	47	43	29	48	52	16	34	41
	Average Weight	78	79	80	61	77	76	65	82	79
	Grams	8,215	2,880	6,758	280	345	600	450	1,513	21,040
	Grams/Episode	36	42	20	70	18	18	50	46	28
	Grams per 1,000 Population	1	0	1	0	0	1	2	3	1
Encephalitis associated with antibodies to VGKC	Patients	6	6	<5	<5	<5		<5	<5	<37
	Average Age	48	56	61	63	70		19	52	56

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	70	83	79	75	85		80	85	76
	Grams	2,443	1,498	1,375	1,798	155		110	170	7,548
	Grams/Episode	29	34	18	47	31		55	170	30
	Grams per 1,000 Population	0	0	0	1	0		0	0	0
Endemic pemphigus foliaceus	Patients		<5						<5	<10
	Average Age		35						67	46
	Average Weight		68						63	66
	Grams		135						125	260
	Grams/Episode		68						125	87
	Grams per 1,000 Population		0						0	0
Evans syndrome child - with significant ITP	Patients			<5		<5				<10
	Average Age			14		15				15
	Average Weight			62		36				38
	Grams			63		460				523
	Grams/Episode			31		22				23
	Grams per 1,000 Population			0		0				0
Evans Syndrome with significant AIHA	Patients	<5	<5	<5	<5		<5			<25
	Average Age	31	70	68	28		59			54
	Average Weight	102	69	70	56		76			71
	Grams	205	320	140	135		245			1,045
	Grams/Episode	103	64	35	34		82			58
	Grams per 1,000 Population	0	0	0	0		0			0
Existing patient - authorisation for IgG subclass deficiency	Patients	5	17	<5	<5	<5	<5	<5		<47
	Average Age	70	69	64	76	69	83	3		66
	Average Weight	114	79	73	100	70	50	13		81
	Grams	2,493	5,687	755	672	1,048	260	83		10,997
	Grams/Episode	27	29	16	19	27	20	3		24
	Grams per 1,000 Population	0	1	0	0	0	0	0		0
Haemophagocytic lymphohistiocytosis	Patients	28	14	11	<5	<5	<5			<68
	Average Age	48	45	54	78	41	35			50

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	66	68	73	80	55	100			69
	Grams	3,848	1,785	1,810	145	433	200			8,220
	Grams/Episode	57	64	29	48	43	100			48
	Grams per 1,000 Population	0	0	0	0	0	0			0
Heart and kidney transplant	Patients		<5	<5			<5			<15
	Average Age		32	44			48			41
	Average Weight		45	80			50			56
	Grams		40	320			25			385
	Grams/Episode		13	160			8			48
	Grams per 1,000 Population		0	0			0			0
Heart and lung transplant	Patients	<5	<5							<10
	Average Age	41	53							48
	Average Weight	60	71							66
	Grams	120	140							260
	Grams/Episode	24	20							22
	Grams per 1,000 Population	0	0							0
Heart transplant	Patients	17	<5	<5	<5					<32
	Average Age	42	64	62	65					52
	Average Weight	70	86	88	62					78
	Grams	1,575	1,000	2,778	25					5,378
	Grams/Episode	14	29	39	25					25
	Grams per 1,000 Population	0	0	1	0					0
Hypogammaglobulinaemia following B cell depletion therapy	Patients	164	86	114	49	10	12	<5	7	437
	Average Age	57	53	57	42	50	62	68	55	54
	Average Weight	77	75	73	64	84	78	69	84	73
	Grams	38,209	18,958	30,706	11,142	1,861	3,154	56	1,989	106,073
	Grams/Episode	26	21	18	13	29	18	7	31	20
	Grams per 1,000 Population	5	3	6	6	1	6	0	4	4
	Patients	154	112	82	5	5	6		6	365
	Average Age	55	60	55	63	55	39		56	56

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Hypogammaglobulinaemia following Solid organ transplantation	Average Weight	68	70	74	73	77	78		87	71
	Grams	29,777	26,860	17,764	1,057	1,259	1,410		2,065	80,189
	Grams/Episode	23	21	16	16	19	15		26	20
	Grams per 1,000 Population	4	4	3	1	0	2		5	3
Idiopathic opsoclonus-myoclonus ataxia	Patients	<5	<5	<5	<5	<5	<5			<30
	Average Age	8	1	26	14	47	2			18
	Average Weight	23	12	39	34	70	17			35
	Grams	598	338	325	910	2,325	68			4,563
	Grams/Episode	14	11	13	28	70	23			27
	Grams per 1,000 Population	0	0	0	1	1	0			0
IgA pemphigus foliaceus	Patients			<5						<5
	Average Age			59						59
	Average Weight			84						84
	Grams			970						970
	Grams/Episode			37						37
	Grams per 1,000 Population			0						0
IgM paraproteinaemic demyelinating neuropathy	Patients	34	17	29	<5	<5	<5		<5	<100
	Average Age	77	76	72	82	62	76		57	74
	Average Weight	77	87	85	68	78	85		65	82
	Grams	15,653	6,860	14,128	2,588	1,183	1,678		330	42,418
	Grams/Episode	37	42	26	51	28	27		24	33
	Grams per 1,000 Population	2	1	3	1	0	3		1	2
ITP - child - chronic	Patients	<5	11	<5	5	<5				<31
	Average Age	13	7	6	11	12				8
	Average Weight	63	29	22	49	68				34
	Grams	168	735	623	395	520				2,440
	Grams/Episode	56	24	20	36	65				29
	Grams per 1,000	0	0	0	0	0				0
ITP - child - newly diagnosed	Patients	10	18	18	12	6			<5	<69
	Average Age	6	4	4	8	5			-	5

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	33	18	25	45	27			9	29
	Grams	443	425	405	970	168			50	2,460
	Grams/Episode	32	15	10	31	21			10	20
	Grams per 1,000 Population	0	0	0	1	0			0	0
ITP - child - persistent	Patients	<5	7	6	<5	<5	<5			<33
	Average Age	7	4	3	9	11	14			5
	Average Weight	39	26	18	63	61	53			32
	Grams	150	525	235	63	720	55			1,748
	Grams/Episode	21	25	9	63	51	55			25
	Grams per 1,000 Population	0	0	0	0	0	0			0
Kidney transplant	Patients	91	230	48	30	26	16	14	6	459
	Average Age	47	52	49	47	46	49	44	47	50
	Average Weight	77	73	82	76	74	94	86	81	77
	Grams	13,585	106,710	13,388	5,585	5,965	10,805	2,315	755	159,108
	Grams/Episode	21	31	13	39	30	34	20	13	27
	Grams per 1,000 Population	2	16	3	3	2	19	9	2	6
Liver and kidney transplant	Patients	<5	<5							<10
	Average Age	17	27							25
	Average Weight	73	41							49
	Grams	250	148							398
	Grams/Episode	50	10							20
	Grams per 1,000 Population	0	0							0
Liver transplant	Patients	<5	<5	<5		<5				<20
	Average Age	29	42	32		2				30
	Average Weight	40	85	64		13				56
	Grams	273	305	183		53				813
	Grams/Episode	17	20	11		8				15
	Grams per 1,000 Population	0	0	0		0				0
Lung transplant	Patients	31	79	<5	9	11	<5		<5	<145
	Average Age	50	55	44	45	51	53		44	53

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	65	74	61	63	64	62		50	70
	Grams	4,355	17,838	393	2,258	1,383	865		100	27,190
	Grams/Episode	26	23	33	35	21	21		25	24
	Grams per 1,000 Population	1	3	0	1	1	2		0	1
Macrophage activation syndrome	Patients	5	<5	<5		<5				<20
	Average Age	64	29	34		66				51
	Average Weight	63	65	69		85				67
	Grams	600	130	260		140				1,130
	Grams/Episode	33	65	19		70				31
	Grams per 1,000 Population	0	0	0		0				0
Monophasic acute disseminated encephalomyelitis (ADEM)	Patients	17	<5	10	<5	<5	<5			<47
	Average Age	35	36	28	3	42	3			31
	Average Weight	76	47	65	15	57	16			66
	Grams	2,403	285	1,043	30	280	83			4,123
	Grams/Episode	36	32	20	15	40	14			29
	Grams per 1,000 Population	0	0	0	0	0	0			0
Mucous Membrane Pemphigoid (MMP)	Patients	5	7	<5	<5		<5		<5	<32
	Average Age	64	66	77	71		50		82	69
	Average Weight	81	94	78	67		74		64	79
	Grams	3,000	7,310	2,490	2,613		1,820		1,585	18,818
	Grams/Episode	35	79	38	29		140		61	51
	Grams per 1,000 Population	0	1	0	1		3		3	1
Multiphasic acute disseminated encephalomyelitis (ADEM)	Patients	5		<5		<5				<15
	Average Age	43		46		68				47
	Average Weight	55		113		73				66
	Grams	840		240		145				1,225
	Grams/Episode	30		40		29				31
	Grams per 1,000 Population	0		0		0				0
Other Hypogammaglobulinaemia	Patients	256	105	214	34	12	18	<5	16	649
	Average Age	64	59	65	41	64	57	69	64	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	78	72	74	64	86	71	65	80	75
	Grams	67,512	23,890	63,684	7,935	3,722	4,394	390	3,681	175,207
	Grams/Episode	28	22	22	14	18	18	30	25	23
	Grams per 1,000 Population	8	4	12	4	1	8	2	8	7
Other transplant	Patients		<5							<5
	Average Age		63							63
	Average Weight		73							73
	Grams		950							950
	Grams/Episode		68							68
	Grams per 1,000 Population		0							0
Pancreas and kidney transplant	Patients	6	5	<5	<5	<5				<26
	Average Age	37	56	40	41	34				44
	Average Weight	79	81	75	77	99				81
	Grams	725	563	340	75	1,120				2,823
	Grams/Episode	16	14	24	15	86				25
	Grams per 1,000 Population	0	0	0	0	0				0
Paraneoplastic associated breast cancer	Patients				<5		<5			<10
	Average Age				83		57			71
	Average Weight				85		51			69
	Grams				1,105		200			1,305
	Grams/Episode				85		17			52
	Grams per 1,000 Population				1		0			0
Paraneoplastic associated neuroblastoma	Patients	<5	<5	5			<5			<20
	Average Age	5	1	2			2			3
	Average Weight	23	11	14			16			16
	Grams	260	60	238			53			610
	Grams/Episode	17	10	7			18			10
	Grams per 1,000 Population	0	0	0			0			0
Paraneoplastic associated other tumour type	Patients	<5								<5
	Average Age	58								58



OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	60								60
	Grams	120								120
	Grams/Episode	30								30
	Grams per 1,000 Population	0								0
Paraneoplastic associated small cell lung cancer	Patients	<5								<5
	Average Age	60								60
	Average Weight	72								72
	Grams	270								270
	Grams/Episode	23								23
	Grams per 1,000 Population	0								0
Pemphigus erythematosus	Patients		<5	<5	<5					<15
	Average Age		53	51	90					55
	Average Weight		121	115	45					114
	Grams		1,645	1,400	90					3,135
	Grams/Episode		63	200	30					87
	Grams per 1,000 Population		0	0	0					0
Pemphigus herpetiformis	Patients								<5	<5
	Average Age								44	44
	Average Weight								70	70
	Grams								-140	-140
	Grams/Episode								-140	-140
	Grams per 1,000 Population								-0	-0
Pemphigus vulgaris	Patients	10	25	7	5	5				52
	Average Age	61	49	67	65	65				59
	Average Weight	96	72	99	100	81				87
	Grams	7,233	13,450	3,690	3,170	6,315				33,858
	Grams/Episode	62	63	25	41	58				51
	Grams per 1,000 Population	1	2	1	2	2				1
	Patients	9	<5	6			<5			<25
	Average Age	63	15	30			3			40

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Recurrent acute disseminated encephalomyelitis (ADEM)	Average Weight	74	76	47			17			62
	Grams	2,893	1,210	1,823			105			6,030
	Grams/Episode	33	34	24			13			29
	Grams per 1,000 Population	0	0	0			0			0
Sero-negative autoimmune encephalitis	Patients	73	16	22	6	5	<5		<5	<132
	Average Age	47	52	59	36	60	16		36	49
	Average Weight	74	79	78	61	67	52		96	75
	Grams	24,198	5,923	6,305	1,945	475	475		993	40,313
	Grams/Episode	37	43	23	41	23	15		55	34
	Grams per 1,000 Population	3	1	1	1	0	1		2	2
Sero-negative limbic encephalitis	Patients	20	6	21	<5	<5	<5		<5	<67
	Average Age	54	49	45	53	72	45		53	48
	Average Weight	75	72	70	75	70	82		98	74
	Grams	6,859	1,035	6,945	825	140	910		890	17,604
	Grams/Episode	41	31	22	69	70	33		37	31
	Grams per 1,000 Population	1	0	1	0	0	2		2	1
Specific antibody deficiency	Patients	176	70	60	87	28	<5	<5	15	431
	Average Age	56	54	60	45	57	66	20	44	53
	Average Weight	69	74	74	63	68	85	79	79	69
	Grams	51,856	20,275	19,934	24,179	7,357	935	96	5,012	129,645
	Grams/Episode	26	22	23	16	17	20	24	33	22
	Grams per 1,000 Population	6	3	4	13	3	2	0	11	5
Staphylococcal TSS	Patients	11	18	12	5	<5		<5		<56
	Average Age	63	29	37	56	19		47		39
	Average Weight	74	68	78	88	69		75		74
	Grams	1,320	1,930	1,790	640	350		150		6,180
	Grams/Episode	102	71	75	91	88		75		80
	Grams per 1,000 Population	0	0	0	0	0		1		0
	Patients	16	10	<5				<5	5	<41
	Average Age	56	38	8				46	43	47

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Stevens–Johnson syndrome / toxic epidermal necrolysis overlap (SJS/TEN)	Average Weight	75	73	29				70	70	71
	Grams	2,030	1,200	58				165	678	4,130
	Grams/Episode	51	57	14				55	85	54
	Grams per 1,000 Population	0	0	0				1	1	0
Streptococcal TSS	Patients	27	48	27	25	10		<5	<5	<147
	Average Age	56	48	38	39	35		61	73	45
	Average Weight	93	84	75	78	79		93	80	82
	Grams	3,508	6,350	3,370	2,915	1,245		188	160	17,735
	Grams/Episode	92	93	60	83	113		188	160	84
	Grams per 1,000 Population	0	1	1	2	0		1	0	1
Suspected autoimmune encephalitis	Patients	110	63	50	19	28	<5	<5	10	<290
	Average Age	49	58	49	48	64	41	51	57	51
	Average Weight	72	71	75	78	75	69	86	95	74
	Grams	26,650	11,768	11,965	5,360	3,985	780	340	2,230	63,078
	Grams/Episode	35	37	20	35	29	39	34	53	31
	Grams per 1,000 Population	3	2	2	3	1	1	1	5	2
Suspected autoimmune limbic encephalitis	Patients	38	12	29	5	<5	<5		<5	<99
	Average Age	54	63	51	58	69	70		59	54
	Average Weight	73	78	76	63	76	100		88	75
	Grams	7,735	1,835	9,243	1,763	185	200		685	21,645
	Grams/Episode	32	44	22	38	26	200		36	28
	Grams per 1,000 Population	1	0	2	1	0	0		2	1
Thymoma-associated hypogammaglobulinaemia (Goods Syndrome)	Patients	8	<5	<5	6	<5	<5		<5	<39
	Average Age	60	69	64	71	63	68		58	65
	Average Weight	65	69	82	64	87	76		66	71
	Grams	2,635	1,084	1,484	1,488	700	432		288	8,110
	Grams/Episode	26	20	36	23	18	8		24	22
	Grams per 1,000 Population	0	0	0	1	0	1		1	0
Toxic epidermal necrolysis (TEN)	Patients	10	7			<5		<5		<27
	Average Age	51	66			34		34		56

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Weight	74	67			80		77		71
	Grams	1,365	970			80		155		2,570
	Grams/Episode	59	57			80		155		61
	Grams per 1,000 Population	0	0			0		1		0
Total - Has an emerging therapeutic role	Patients	1,428	1,058	894	339	195	82	26	96	4,074
	Average Age	56	55	57	48	57	54	40	54	55
	Average Weight	74	74	76	66	75	79	72	81	74
	Grams	359,257	317,094	263,052	92,838	50,021	30,129	4,498	25,631	1,142,519
	Grams/Episode	30	30	22	22	29	24	23	35	26
	Grams per 1,000 Population	44	48	50	51	18	53	18	57	44
Has application in exceptional circumstances only										
Acquired bleeding disorder, other coagulation factors (Prothrombin, factor V, factor VII, factor X, factor XI, and factor XIII)	Patients	<5	<5							<10
	Average Age	55	82							73
	Average Weight	50	80							70
	Grams	50	110							160
	Grams/Episode	50	55							53
	Grams per 1,000 Population	0	0							0
Acquired haemophilia A	Patients	<5	<5							<10
	Average Age	75	75							75
	Average Weight	80	83							82
	Grams	330	455							785
	Grams/Episode	55	30							37
	Grams per 1,000 Population	0	0							0
Acquired von Willebrand syndrome	Patients	<5	<5	<5	<5	6			<5	<31
	Average Age	69	80	60	66	69			73	65
	Average Weight	57	70	83	68	71			71	75
	Grams	675	490	4,675	435	3,920			763	10,958
	Grams/Episode	45	70	49	62	61			54	54
	Grams per 1,000 Population	0	0	1	0	1			2	0
	Patients	<5	<5	5	<5					<20

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	41	52	62	28					53
	Average Weight	147	168	66	155					102
	Grams	770	160	565	200					1,695
	Grams/Episode	48	27	16	50					27
	Grams per 1,000 Population	0	0	0	0					0
Ataxic sensory neuronopathy	Patients	7		<5	<5				<5	<22
	Average Age	62		57	85				70	63
	Average Weight	85		65	75				73	82
	Grams	3,605		75	140				370	4,190
	Grams/Episode	47		8	35				74	44
	Grams per 1,000 Population	0		0	0				1	0
Atypical rolandic epilepsy	Patients	<5	8	<5						<18
	Average Age	7	11	13						12
	Average Weight	21	46	38						40
	Grams	210	1,400	1,578						3,188
	Grams/Episode	18	27	24						25
	Grams per 1,000 Population	0	0	0						0
Autoimmune neutropenia	Patients	7		<5	5	<5				<22
	Average Age	56		68	60	49				55
	Average Weight	72		90	62	49				64
	Grams	1,275		180	315	645				2,415
	Grams/Episode	51		60	63	38				48
	Grams per 1,000 Population	0		0	0	0				0
Autoimmune retinopathy	Patients	<5	6	<5						<16
	Average Age	77	47	77						54
	Average Weight	103	89	100						92
	Grams	660	3,370	50						4,080
	Grams/Episode	60	96	50						87
	Grams per 1,000 Population	0	1	0						0
Autonomic neuropathy	Patients	<5		<5					<5	<15

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Age	57		56					60	57
	Average Weight	71		87					90	77
	Grams	1,370		1,190					285	2,845
	Grams/Episode	24		37					57	30
	Grams per 1,000 Population	0		0					1	0
Catastrophic anti-phospholipid syndrome	Patients	9	<5	<5						<19
	Average Age	54	40	49						52
	Average Weight	92	93	85						89
	Grams	1,835	185	680						2,700
	Grams/Episode	50	185	28						44
	Grams per 1,000 Population	0	0	0						0
Confirmed autoimmune congenital heart block in a fetus	Patients		<5							<5
	Average Age		30							30
	Average Weight		67							67
	Grams		68							68
	Grams/Episode		68							68
	Grams per 1,000 Population		0							0
Congenital haemophilia A with acquired factor VIII inhibitor	Patients	<5								<5
	Average Age	78								78
	Average Weight	74								74
	Grams	75								75
	Grams/Episode	75								75
	Grams per 1,000 Population	0								0
Eosinophilic granulomatosis with polyangiitis (Churg-Strauss Syndrome)	Patients				<5					<5
	Average Age				40					40
	Average Weight				64					64
	Grams				323					323
	Grams/Episode				36					36
	Grams per 1,000 Population				0					0
	Patients	<5	<5		<5					<15

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Epidermolysis bullosa acquisita	Average Age	90	62		76					69
	Average Weight	75	108		83					96
	Grams	80	480		490					1,050
	Grams/Episode	40	40		70					50
	Grams per 1,000 Population	0	0		0					0
Granulomatosis with polyangiitis (Wegener Granulomatosis)	Patients			<5	<5					<10
	Average Age			56	43					45
	Average Weight			69	96					93
	Grams			290	1,998					2,288
	Grams/Episode			29	29					29
	Grams per 1,000 Population			0	1					0
Graves ophthalmopathy	Patients			<5	5					<10
	Average Age			49	56					56
	Average Weight			90	83					84
	Grams			180	1,260					1,440
	Grams/Episode			45	37					38
	Grams per 1,000 Population			0	1					0
Haemolytic disease of the fetus	Patients	<5	<5			<5			<5	<20
	Average Age	30	37			35			38	32
	Average Weight	68	60			85			80	73
	Grams	2,673	240			1,625			-	4,538
	Grams/Episode	62	60			74			-	62
	Grams per 1,000 Population	0	0			1				0
Hyperhaemolysis syndrome	Patients	<5	<5						<5	<15
	Average Age	48	44						32	43
	Average Weight	71	60						66	68
	Grams	545	180						268	993
	Grams/Episode	68	60						67	66
	Grams per 1,000 Population	0	0						1	0
Landau Kleffner syndrome	Patients	<5	<5							<10

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Age	25	8							18
	Average Weight	80	20							55
	Grams	880	160							1,040
	Grams/Episode	80	20							55
	Grams per 1,000 Population	0	0							0
Lennox-Gastaut syndrome	Patients	5		7	<5			<5	<5	<27
	Average Age	8		5	4			9	13	6
	Average Weight	24		19	18			24	41	22
	Grams	1,025		588	125			45	480	2,263
	Grams/Episode	29		7	16			45	34	16
	Grams per 1,000 Population	0		0	0			0	1	0
LETMs	Patients	7		<5	<5			<5		<22
	Average Age	54		43	13			44		50
	Average Weight	68		101	55			50		73
	Grams	1,445		590	130			100		2,265
	Grams/Episode	24		35	43			33		28
	Grams per 1,000 Population	0		0	0			0		0
Microscopic polyangiitis	Patients			<5	<5					<10
	Average Age			77	43					49
	Average Weight			73	62					64
	Grams			145	1,620					1,765
	Grams/Episode			24	58					52
	Grams per 1,000 Population			0	1					0
NMOSD–AQP4 ab positive	Patients	6	<5							<11
	Average Age	61	62							61
	Average Weight	67	76							68
	Grams	1,760	258							2,018
	Grams/Episode	38	43							39
	Grams per 1,000 Population	0	0							0
NMOSD–MOG ab positive	Patients	18	11	<5	<5	<5		<5	<5	<54



OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
	Average Age	41	34	62	15	45		52	77	41
	Average Weight	78	76	95	49	80		67	92	77
	Grams	4,898	2,933	645	930	2,900		265	653	13,223
	Grams/Episode	36	30	26	31	48		27	65	36
	Grams per 1,000 Population	1	0	0	1	1		1	1	1
NMOSD—seronegative	Patients	18	7	<5	6	<5	<5			<46
	Average Age	57	36	34	27	56	14			46
	Average Weight	85	85	62	85	46	51			82
	Grams	5,341	1,933	525	2,020	90	190			10,099
	Grams/Episode	34	37	24	39	18	63			35
	Grams per 1,000 Population	1	0	0	1	0	0			0
Paediatric acute neuropsychiatric disorders (PANS)	Patients	16	<5	8	<5		<5	<5		<44
	Average Age	13	13	12	19		10	13		13
	Average Weight	56	43	57	75		45	57		57
	Grams	10,508	178	2,963	1,115		90	113		14,965
	Grams/Episode	71	44	22	112		11	56		49
	Grams per 1,000 Population	1	0	1	1		0	0		1
Paediatric autoimmune neuropsychiatric disorder (PANDAS)	Patients	<5	<5	7				<5		<22
	Average Age	10	13	13				13		13
	Average Weight	45	58	63				58		60
	Grams	865	1,163	7,220				240		9,488
	Grams/Episode	38	45	45				60		45
	Grams per 1,000 Population	0	0	1				1		0
Painful small fibre neuropathy	Patients	<5	<5	<5		<5		<5	<5	<30
	Average Age	64	48	60		60		76	68	60
	Average Weight	68	65	51		79		80	76	69
	Grams	1,285	1,210	565		1,420		880	1,593	6,953
	Grams/Episode	33	22	23		39		59	39	33
	Grams per 1,000 Population	0	0	0		1		4	4	0
	Patients	8	<5	8	<5				<5	<31

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Pure red cell aplasia – associated B19 infection	Average Age	74	24	41	83				37	45
	Average Weight	86	30	64	97				64	64
	Grams	1,743	548	1,980	135				375	4,780
	Grams/Episode	67	30	22	135				75	34
	Grams per 1,000 Population	0	0	0	0				1	0
Pure red cell aplasia – autoimmune mediated	Patients	5	<5	<5	<5	<5	<5		<5	<35
	Average Age	60	52	68	61	62	49		79	61
	Average Weight	75	84	111	98	95	76		69	86
	Grams	750	330	730	180	840	150		140	3,120
	Grams/Episode	75	83	91	90	93	15		28	65
	Grams per 1,000 Population	0	0	0	0	0	0		0	0
Pyoderma Gangrenosum	Patients	11	30	20	<5	<5			<5	<76
	Average Age	57	62	62	45	50			21	60
	Average Weight	83	86	90	65	115			71	87
	Grams	7,578	28,965	9,000	1,740	930			70	48,283
	Grams/Episode	63	69	26	45	40			35	51
	Grams per 1,000 Population	1	4	2	1	0			0	2
Rasmussen encephalitis	Patients	9	9	6	<5	<5	<5		<5	<44
	Average Age	32	30	38	17	39	13		64	34
	Average Weight	70	67	64	94	112	69		67	70
	Grams	4,298	3,518	1,670	870	715	138		275	11,483
	Grams/Episode	42	41	14	38	55	17		21	32
	Grams per 1,000 Population	1	1	0	0	0	0		1	0
Relapsing remitting multiple sclerosis	Patients	20	12	5					<5	<42
	Average Age	42	45	68					50	48
	Average Weight	74	78	72					60	74
	Grams	4,870	2,743	1,505					780	9,898
	Grams/Episode	29	31	27					52	30
	Grams per 1,000 Population	1	0	0					2	0
	Patients								<5	<5

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Risk of autoimmune congenital heart block – previously affected sibling	Average Age								37	37
	Average Weight								58	58
	Grams								60	60
	Grams/Episode								15	15
	Grams per 1,000 Population								0	0
Scleromyxedema – skin and systemic disease	Patients	5	<5		<5	<5				<20
	Average Age	68	68		54	77				66
	Average Weight	78	58		123	57				81
	Grams	2,958	1,085		3,200	2,055				9,298
	Grams/Episode	42	21		52	44				41
	Grams per 1,000 Population	0	0		2	1				0
Scleromyxedema – skin involvement only	Patients	<5	<5		<5	<5				<20
	Average Age	35	85		62	35				63
	Average Weight	97	91		70	97				82
	Grams	1,755	2,225		2,765	780				7,525
	Grams/Episode	98	62		48	98				63
	Grams per 1,000 Population	0	0		2	0				0
Sensorimotor axonal neuropathy	Patients	5	<5			<5		<5		<20
	Average Age	65	74			62		72		68
	Average Weight	61	54			60		90		64
	Grams	1,810	283			150		600		2,843
	Grams/Episode	39	22			25		50		36
	Grams per 1,000 Population	0	0			0		2		0
Susac syndrome	Patients	11	<5	9	<5	<5		<5		<40
	Average Age	39	50	51	58	35		40		47
	Average Weight	97	69	90	65	76		74		87
	Grams	9,408	1,575	6,638	2,260	258		73		20,210
	Grams/Episode	50	36	38	30	43		73		41
	Grams per 1,000 Population	1	0	1	1	0		0		1
	Patients	7	<5	<5	<5	<5			<5	<32

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Systemic capillary leak syndrome	Average Age	50	74	64	32	51			61	60
	Average Weight	79	77	72	82	80			75	76
	Grams	2,638	2,660	1,990	1,040	940			800	10,068
	Grams/Episode	33	46	22	80	72			80	38
	Grams per 1,000 Population	0	0	0	1	0			2	0
Vaccine induced immune thrombotic thrombocytopenia (VITT)	Patients	99	37	33	17	5			<5	<196
	Average Age	62	67	62	66	73			27	63
	Average Weight	83	80	83	80	83			87	82
	Grams	13,785	4,493	4,950	1,790	640			90	25,748
	Grams/Episode	64	68	41	51	80			90	58
	Grams per 1,000 Population	2	1	1	1	0			0	1
West syndrome	Patients			<5		<5				<10
	Average Age			7		6				7
	Average Weight			21		28				22
	Grams			313		55				368
	Grams/Episode			13		14				13
	Grams per 1,000 Population			0		0				0
Total - Has application in exceptional circumstances only	Patients	296	158	150	63	35	<25	<30	<45	720
	Average Age	47	52	44	46	56	25	58	57	48
	Average Weight	77	77	72	80	77	63	74	70	75
	Grams	93,749	63,393	51,478	25,080	17,963	568	2,315	7,000	261,544
	Grams/Episode	47	50	29	43	53	20	48	46	42
	Grams per 1,000 Population	12	10	10	14	7	1	9	15	10
Use is not supported										
Diabetic amyotrophy	Patients		<5							<5
	Average Age		82							82
	Average Weight		88							88
	Grams		140							140
	Grams/Episode		35							35
	Grams per 1,000 Population		0							0

OFFICIAL

Specific Condition		NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National
Myocarditis in children	Patients		<5	<5						<10
	Average Age		12	1						5
	Average Weight		48	12						24
	Grams		95	13						108
	Grams/Episode		95	6						36
	Grams per 1,000 Population		0	0						0
Polyneuropathy of critical illness	Patients								<5	<5
	Average Age								70	70
	Average Weight								145	145
	Grams								280	280
	Grams/Episode								47	47
	Grams per 1,000 Population								1	0
Sepsis	Patients	<5	<5		<5					<15
	Average Age	36	40		56					45
	Average Weight	75	110		69					81
	Grams	315	370		420					1,105
	Grams/Episode	79	123		84					92
	Grams per 1,000 Population	0	0		0					0
Total - Use is not supported	Patients	<5	<5	<5	<5				<5	<25
	Average Age	36	40		56					45
	Average Weight	75	110		69					81
	Grams	315	370		420					1,105
	Grams/Episode	79	123		84					92
	Grams per 1,000 Population	0	0		0					0
Total	Patients	8,311	5,245	5,551	1,795	1,427	495	138	520	23,127
	Average Age	61	60	62	57	61	62	49	57	61
	Average Weight	77	78	79	75	78	82	76	80	78
	Grams	2,701,090	1,745,372	1,963,638	642,279	428,408	175,223	36,373	178,419	7,870,800
	Grams/Episode	35	32	25	28	30	25	40	36	30
	Grams per 1,000 Population	334	266	373	356	155	308	146	394	306

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.....	Nil
Table 3: Grams recorded in the different systems held by the NBA.....	Both
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
Table 10: Ig grams dispensed by speciality and state and territory for 2021-22 .....	BloodSTAR
Table 11: Patients dispensed Ig by speciality and state and territory for 2021-22 .....	BloodSTAR
Table 12: New patients dispensed Ig by speciality and state and territory for 2021-22.....	BloodSTAR
Table 13: Grams dispensed by state and territory and medical condition for 2021-22.....	BloodSTAR
Table 14: Patients dispensed by SCIg/IVIg, medical conditions and product for 2021-22.....	BloodSTAR
Table 15: Grams dispensed by SCIg/IVIg, medical conditions and product for 2021-22.....	BloodSTAR
Table 16: Patients dispensed by SCIg medical conditions and state and territory for 2021-22.....	BloodSTAR
Table 17: Grams dispensed by SCIg medical conditions and state and territory for 2021-22 .....	BloodSTAR
Figure 1: Snapshot .....	All
Figure 2: Per cent dispensed 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
Figure 7: Patient age relative to Australian average .....	BloodSTAR
Figure 8: Grams of Ig dispensed by speciality .....	BloodSTAR
Figure 9: Grams of Ig dispensed by top 10 medical conditions.....	BloodSTAR
Figure 10: NHIg grams issued 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 2021-22 .....	BloodSTAR