INTRODUCTION & METHODS

In Australia it is estimated that over 99% of all intravenous immunoglobulin (Ig) is supplied under the national blood arrangements. For this reason, Australia is in a unique position to provide patient and population based analysis and commentary on the use of Ig.

The Criteria for the Clinical Use of Intravenous Immunoglobulin (Ig) in Australia (Criteria) identifies the conditions and circumstances for which the use of Ig is funded under national blood arrangements. Aggregated de-identified data collected for the purpose of assessing issues against the Ig Criteria for Use were analysed for 2013-14 to present a national picture of Ig use in Australia, focusing on Ig use for the top 4 conditions.

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**Primary Immunodeficiency Disease**

1,811 patients | Median age 52 | 558,617 grams of IVIg (13.9%)

- The number of patients per 1,000 population varies between states from 0.00002 in Western Australia to 0.00005 in Queensland. The reason for this variation is unknown, but may be a variety of factors including the age of the population, access to health services and disease behaviour.

- There is a six fold difference between the grams issued per 1,000 population between South Australia and Queensland.

**Myasthenia Gravis**

747 patients | Median age 62 | 313,940 grams of IVIg (7.8%)

- The rate of growth in Ig demand for myasthenia gravis is much higher than the other top 4 conditions at 89% over the last five years; an average of 19% per annum; this is noteworthy considering that myasthenia gravis accounts for 8% of Ig issues in 2013-14.

- The increase in patient numbers over the last five years is 42%, an average of 9% per annum.

**Chronic inflammatory demyelinating polyneuropathy**

3,907 patients | Median age 69 | 862,898 grams of IVIg (21.4%)

- The rate of growth in Ig demand for Chronic inflammatory demyelinating polyneuropathy is 38% over five years; an average of 12% per annum.

- The increase in patients over the last five years is 53%, an average of 13% per annum.

**Acquired hypogammaglobulinaemia secondary to haematological malignancies**

1,903 patients | Median age 64 | 857,533 grams of IVIg (21.3%)

- The rate of growth in Ig demand for Acquired hypogammaglobulinaemia secondary to haematological malignancies is 58% over five years; an average of 13% per annum.

- The increase in patients over the last five years is 62%, an average of 12% per annum.

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CONCLUSION

Ig demand is rising at a rate that is unsustainable. Data and research to identify patients that most benefit from Ig therapy, as well as research to identify more accurate biomarkers of immune deficiency and alternative therapies is important to ensure a sustainable supply of Ig into the future. The National Blood Authority is developing a database to improve the quality and scope of data available. This will support future activities aimed to ensure that Ig is supplied to treat the patients who benefit most from this treatment.

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