

iTRANSFUSEFACTSHEET

all about blood

I NEED TO KNOW ABOUT IMMUNOGLOBULIN INFUSIONS

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What are immunoglobulins?

Immunoglobulin (Ig) is another name for antibody. Antibodies are molecules made by a specialised immune cell called the plasma cell.

What do immunoglobulins do?

Their role is to fight infection and disease.

Where can immunoglobulin be found? Ig are most commonly found in plasma. There are a few types of Ig. One of these, IgA, can also be found in saliva and other fluids.

Can immunoglobulin be used for patients?

YES. Ig extracted from plasma, by a process called fractionation (more on this in another iTRANSFUSE edition), is steadily increasing in use for a number of conditions.

What is an immunoglobulin infusion?

A solution of immunoglobulin is infused into the vein (intravenously – IV), this is the most commonly used solution. Immunoglobulins can also be administered into the tissue under the skin (subcutaneously – SC) or as an injection into the muscle (intramuscularly – IM).

What different IVIg products are available?

The Australian product made from plasma supplied by the Australian Red Cross Blood Service to CSL is Intragam®P. Australia also imports IVIg to help meet the clinical demand.

What patient conditions require immunoglobulin infusions?

There are two major types of conditions where immunoglobulin infusions are used:

1. Replacement therapy for patients who do not make enough immunoglobulin and have an immune deficiency. There are many causes of immune deficiencies, some are inherited problems from birth (primary) and some are acquired from other diseases or treatments such as cancer (secondary).



2. Immunomodulating therapy for autoimmune disorders where the body's immune system attacks the body's own tissues by mistake.

Are there any rules around the use of IVIg?

All Australian governments fund IVIg under the National Blood Arrangements. Under these arrangements, IVIg is free of charge to patients who meet specific criteria. The *Criteria for the Clinical Use of Intravenous Immunoglobulin in Australia (the Criteria)* lists these specific criteria in chapters 5, 6 and 7. *The Criteria* is available on the National Blood Authority's website www.nba.gov.au. The Blood Service's Transfusion Medicine Services team receives and reviews requests from doctors for IVIg, and issues IVIg based on *the Criteria*.

How much plasma is needed to make IVIg?

It takes plasma from eight whole blood donors or four apheresis plasma donors to make one 200 mL vial of Intragam®P IVIg. A person with Guillain-Barré Syndrome (an autoimmune

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IVIg is very precious and is currently worth more than twice the price of gold on a gram for gram basis. For the patients who need it though, it's priceless!

disease of the nerves) may receive 200 mL of IVIg for every kilogram of body weight. So a 60 kg woman could need 120 grams of Intragam®P – the equivalent of plasma from 80 whole blood donors – to provide one treatment.

The information contained in this fact sheet is not intended to be medical or professional advice. The disclaimer found at transfusion.com.au applies to this fact sheet.

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