

# Intravenous Immunoglobulin (IVIg)

## First Line Treatment

Intravenous Immunoglobulin (IVIg) is a solution of human plasma proteins, particularly IgG antibodies, with a broad spectrum of antibody activity. IVIg is prepared from large pools of human plasma collected from several thousand blood donors.

All IVIg products are treated and screened to protect patients from diseases and undergo at least two processes that destroy viruses. The risk of infection from this product is very low.

Intravenous immunoglobulin is commonly referred to as IVIg and can be used soon before, during or after medical procedures or on-demand as a first-line or rescue therapy. IVIg can be combined with other treatments, including corticosteroids.

IVIg is used to treat many immune deficiency disorders, and in Immune Thrombocytopenia (ITP), it is used to elevate the platelet count temporarily.

Although IVIG is not expected to result in a sustained, elevated platelet count, in rare cases, this does occur, and the treatment can be repeated for longer-lasting results.



**BRAND NAMES** Privigen® AU (CSL Behring), Privigen® (CSL Behring) [Imported], Flebogamma® (Grifols), Gamunex® (Grifols), Octagam®10% (Octapharma), Kiovig® 10% (Takeda).



### HOW DOES THE TREATMENT WORK?

IVIg is a blood product that reduces the destruction of antibody-coated platelets.



### HOW IS IT ADMINISTERED?

The IVIg is slowly administered over 4 to 8 hours directly into the child's vein through an IV.



### DOSAGE

Dosing options include 0.4g/kg daily for 3-5 days or 1g/kg for 1-2 days, with the latter having a faster response.



### COMMON SIDE EFFECTS

The most common side effects of IVIG include headache, fever, chills, nausea or vomiting, muscle pain or chest pain. In many cases, slowing the infusion rate can help reduce these side effects. Premedication with antihistamines or occasionally steroids can also help reduce side effects.

# Intravenous Immunoglobulin (IVIg)

## First Line Treatment



### RARE SIDE EFFECTS

Aseptic meningitis, hypotension (low blood pressure), haemolysis (breakdown of red blood cells), kidney failure, thrombosis (blood clots), and anaphylaxis (severe allergy) have been reported.



### TREATMENT RESPONSE

24 to 48 hours and effects generally last several days to weeks.

The 5% and 10% formulations have similar efficacy.

In some instances, the effectiveness of IVIg can reduce over time when used repeatedly.



### LIKELIHOOD OF AN INITIAL RESPONSE

Approximately 75%.



### OTHER CONSIDERATIONS

The American Society of Hematology (ASH) Guidelines panel recommends that children who:

- are newly diagnosed ITP and who have no or minor bleeding, the ASH guideline panel recommends observation rather than IV immunoglobulin (IVIg)
- are newly diagnosed ITP who have non-life-threatening mucosal bleeding and/or diminished health-related quality of life (HRQoL), suggests either anti-D immunoglobulin or IVIG
- are newly diagnosed ITPs who have non-life-threatening mucosal bleeding and/or diminished HRQoL, suggest corticosteroids rather than IVIg and assume that a short course of corticosteroids is being used for treatment.

IVIg may increase platelet count more rapidly than corticosteroids when each is used as a single agent.

Pre-treatment and post-treatment may be necessary to minimise side effects.

Remember to hydrate well.

Lowering the infusion rate can also help. However, the risks associated with the use of a blood product should be discussed.

Currently, allocation of domestic or imported immunoglobulin products, including Kiovig 10%, will be managed within BloodSTAR based on patients' specific conditions, according to a pre-determined allocation matrix that the NBA regularly adjusts.

### REFERENCES

<https://itpaustralia.org.au/itp-in-children/>

<https://itpaustralia.org.au/introduction-of-imported-immunoglobulin-product-kiovig>

<http://itpaustralia.org.au/wp-content/uploads/2024/10/2023-ANZCHOG-Paediatric-ITP-Treatment-Guidelines.pdf>

This information is for information purposes only. It is not intended to substitute professional medical advice and should not be solely relied on as health or personal advice. Always seek the guidance of your healthcare professional with any questions you may have regarding your health or specific treatments. OCT24