



MEDICATION GUIDE

INTRAVENOUS IMMUNE GLOBULIN (IVIG)

Gammaplex, Gammaked, Bivigam and others

What is immune globulin?

Immune globulin is a mixture of blood proteins that is made by the human immune system. These proteins are called antibodies. Antibodies protect us from infection. Immune globulin helps our bodies fight off infection and disease. It may also decrease inflammation. Immune globulin can be removed from the blood and then used to treat medical conditions.

How is immune globulin given?

Immune globulin is usually given through a needle in your vein that is connected to an intravenous (IV) line. Therefore, it is called intravenous immune globulin (IVIG).

You will receive your doses of IVIG in the physician's office. It may take many hours to receive a single dose.

What is IVIG used for?

IVIG is used to treat a wide variety of conditions. Some of these are:

- **Immune deficiency** (when someone does not produce enough immune globulin)
- **Idiopathic thrombocytic purpura** (a bleeding disorder)
- **Chronic demyelinating polyneuropathy** (a disease of the peripheral nervous system, the system of nerves that sends information to and from the brain and spinal cord)

- **Myasthenia Gravis** crisis or worsening. This is an autoimmune disease of the neuromuscular junction.
- Prevention of **graft vs. host disease** (a condition that can occur after a bone marrow or stem cell transplant)
- Infection in people who have had stem cell transplants

Doses and Dosing Schedule

Receiving your full dose of IVIG can take anywhere from 2 hours to 1 to 2 days, depending on your dose. Ask your doctor or nurse ahead of time how long your infusion will last so that you know how to plan your time.

There are different schedules for receiving IVIG, some people receive 1 dose once a month, or 1 dose for 2 or 3 days in a row every 4 to 6 weeks, or 1 dose every few weeks. Ask your doctor or nurse how often you will be receiving IVIG.

Your dosing schedule will depend on:

- The medical condition you are receiving IVIG for
- Your weight (make sure to tell your doctor or nurse if you gain or lose weight)
- How well your kidneys are functioning
- Other health conditions you may have

There may be shortages of IVIG at times. During a shortage, you may not be able to receive your IVIG at your regular time.

To prevent any waste, IVIG is prepared only after you arrive for your treatment. IVIG needs to be prepared by the nurse and this takes time. Thank you for your patience.

Are there any side effects?

While you are receiving your dose of IVIG, you may have some side effects.

Some common side effects are:

- High blood pressure (your nurse will monitor your blood pressure while you are receiving IVIG)
- Fever or chills
- Nausea or vomiting

- Muscle aches or pains

Some of these side effects may go away if they are treated with certain medicines. Talk with your nurse to see what kinds of medicines have been ordered with your IVIG infusion.

- **Tell your nurse right away if you have:**
 - Wheezing
 - Chest tightness
 - A hard time breathing
 - Swelling in your face, lips tongue or throat

Other less common side effects of IVIG include:

Migraines

Some people have bad headaches after receiving IVIG. People who have had migraines in the past are more likely to get them from IVIG treatment.

- **Tell your doctor right if you have had migraines before. Ask if you can take medicine to treat them.**

Aseptic Meningitis

Aseptic meningitis is inflammation of the lining of the brain and spinal cord. This is a rare side effect of IVIG. It feels like a severe headache. These headaches may occur several hours to 2 days after you receive your dose of IVIG.

- **Tell your doctor if you have any severe headaches after your dose of IVIG.**

Kidney problems

IVIG may cause your kidneys not to work as well as normal. Tell your doctor if you have kidney disease nor or have had kidney disease in the past. If you have, extra precautions may be taken, such as making sure you receive extra fluids through your IV before you receive IVIG.

- **Call your doctor right away if you cannot pass urine.**

Blood Clots

Receiving IVIG may increase the thickness (viscosity) of your blood. This may increase your chances of getting a blood clot.

Tell your doctor if you have any pain or swelling in your arms or legs, or where the IV was.

Call 911 or proceed to the nearest emergency room if you have:

- Chest pain
- Shortness of breath
- Sudden weakness or numbness or tingling on one side of your body
- Sudden vision changes

Blood Complications

Very rarely, receiving IVIG may be linked with **hemolysis** (breakdown of red blood cells) and a decrease in the number of white blood cells. These side effects are not common.

- **Tell your doctor if you have extreme fatigue (tiredness), dark urine, yellow skin color (jaundice), abdominal pain, shortness of breath, or rapid heart rate.**

How safe is IVIG?

- IVIG is prepared from the blood of people who are volunteer blood donors. These volunteers are screened by filling you a detailed questionnaire and health history before they donate blood. If they have any condition that could make the blood supply unsafe, they are not allowed to donate their blood.
- All blood products in the U.S. are tested for harmful bacteria and viruses. They are also processed so that any potential viruses are killed. All blood products that are processed in the U.S. are believed not to contain harmful bacteria, viruses, and prions (proteins that cause infections).
- The dose of IVIG you receive may require that you also receive a lot of IV fluid. Because of this, you may also receive diuretics. These medications will remove excess fluid from your body. This will help prevent swelling or major changes in the amount of blood in your body.

- IVIG may change how your body responds to vaccines. If you need a vaccine that uses a live virus, talk with your doctor first. Make sure you get your vaccine before you receive IVIG. Or ask your doctor how long to wait after receiving IVIG before getting the vaccine.
- A very small number of people do not have an immune globulin called immunoglobulin A (IgA). If you have this rare condition, talk with your doctor. You will need to receive a special type of IVIG.