Immunoglobulin is another word for antibodies. Antibodies fight infection in our body. This therapy helps children with immune deficiency, so they can better fight infections.

What is immunoglobulin (IgG) replacement therapy?

Antibodies help protect the body against infections such as bacteria and viruses. Immunoglobulin replacement therapy contains antibodies, also known as immunoglobulins. They come from a part of the blood called plasma from healthy donors. The antibodies are removed from the plasma and cleaned.

Why do some people need IgG replacement therapy?

- Immunoglobulin replacement therapy is helpful to some people with primary immunodeficiency (PI). It temporarily replaces the infection-fighting antibodies they are missing.
- We often give IgG replacement therapy to a child because the B cells (B lymphocytes) of their immune system are not working. When a bacteria or virus invades, B cells make specific antibodies that destroy the invading germ.
- If the B cells are not working, they cannot make antibodies. Low levels of antibodies increase the risk for getting a life-threatening infection.
- An infusion of IgG replaces antibodies your child’s body should be making. It does not help the body make more antibodies. This means your child may need IgG replacement therapy for the rest of their life.

How does my child get IgG replacement therapy?

An infusion is a way to slowly introduce a liquid (or medicine) into your child’s body tissue or blood. We give the medicine through a needle in a vein (intravenously) or through a needle into the fat tissue just below the skin (subcutaneously). Your doctor decides which way to give it and the correct amount (dosage) of IgG based on your child’s weight, condition, and how well the IgG treats or prevents symptoms.

There are 2 types of IgG infusion

1. Intravenous immunoglobulin (IVIG)

We give IVIG using a needle directly into a vein. Most often, we do the first few infusions of IgG replacement therapy in a vein by IV, and then some children may switch to getting it under the skin. Your child must get the first infusion of any IgG product in an infusion center or doctor’s office to watch for any signs of reaction.

To Learn More
- Immunology 206-987-7450
- Ask your child’s healthcare provider
- seattlechildrens.org

Free Interpreter Services
- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.
### Immunoglobulin Replacement Therapy

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| **How long does each treatment take?**                     | • The first infusion of IVIG is always longer and can take 4 to 6 hours. If tolerated well, the next infusion can take less time – about 2 to 4 hours. Slowing the infusion rate of the first infusions can help avoid side effects.  
  • We give IVIG every 3 to 4 weeks.                                                                                                     |
| **What are the side effects?**                             | The most common side effects with IVIG are headaches, fatigue, body aches and rash that usually happen within 24 hours after the infusion. It is rare to have a true allergic reaction or anaphylaxis, such as hives or difficulty breathing. We may give your child medicines before their first infusion (premedication or premeds) to lower the chance of having a reaction. Premeds may include acetaminophen (Tylenol), ibuprofen (Motrin, Advil), or diphenhydramine (Benadryl). If your child tolerates the infusions well, over time we may stop some of the premeds. |
| **Where do I go for treatment?**                           | If your child is an adult (over age 21), we will work with you and your referring provider to decide the best location for your first infusions. After that, you may transition to home therapy through a home health care company where a nurse comes to infuse the IVIG. Children under age 21 who live locally may get their first infusion at our infusion center and may continue to infuse IVIG in our center or may transition to a home health care company. |
| **2. Subcutaneous immunoglobulin (SClg)**                  | We give SClg using a small needle that goes under the skin into the fatty tissue (subcutaneous tissue). SClg infusions are an option for many people with immune deficiencies, usually after first receiving IV infusions. |
| **How long does each treatment take?**                     | • The length of time for each infusion varies greatly depending on the dose and the specific SClg product. Most infusions take less than 1 hour. Talk with your provider about the right SClg product and dosing intervals for your child.  
  • We give SClg infusions at regular intervals - usually once a week.                                                                      |
| **What are the side effects?**                             | The most common side effects seen with SClg are rash at site of the injection, headache and fatigue.                                                                                                     |
| **Where do I go for treatment?**                           | If the first dose is tolerated well, most people self-infuse at home after receiving training from a healthcare provider.                                                                                   |
| **How do I choose between IVIG or SClg?**                  | Talk with your healthcare provider and the immunology nurses about which therapy will be best for you, IVIG or SClg.                                                                                           |
|                                                            | IVIG may not be an option if your child has difficulty with IV lines. SClg is a great option for those who like to be able to travel with their medicine or prefer the freedom of self-infusing at home on their own schedule. |
Where can I learn more?

- **Seattle Children’s Hospital**
  The Immunology Department's home page has a wealth of information regarding primary immunodeficiency (PI).
  [seattlechildrens.org/clinics/immunology/](http://seattlechildrens.org/clinics/immunology/)

- **Immune Deficiency Foundation**
  A national patient organization dedicated to improving the diagnosis, treatment and quality of life of people with PI diseases through advocacy, education and research.
  [primaryimmune.org](http://primaryimmune.org)
  1-800-296-4433

- **Jeffrey Modell Foundation**
  A nonprofit organization dedicated to early diagnosis, meaningful treatments and cure of PI.
  [info4pi.org](http://info4pi.org)

Who do I call if I have questions, an urgent health matter, or I need an appointment or refill?

- For questions about your IgG replacement therapy, call the Immunology office at 206-987-7450.

- For any urgent medical issues that need immediate treatment, see your primary care physician (PCP).

- To schedule appointments with Immunology or to schedule an IgG infusion, call 206-987-7450 x1.

- To have a prescription refilled, have your home health care company fax a request directly to 206-985-3119.