

# STAYING ON TREATMENT TO HELP PREVENT SERIOUS INFECTIONS

**Taking ACTIMMUNE®  
(Interferon gamma-1b)  
and taking charge of  
your CGD**

## **What is ACTIMMUNE® used for?**

ACTIMMUNE® is part of a drug regimen used to treat Chronic Granulomatous Disease, or CGD. CGD is a genetic disorder, usually diagnosed in childhood, that affects some cells of the immune system and the body's ability to fight infections effectively. CGD is often treated (though not cured) with antibiotics, antifungals, and ACTIMMUNE®.

## **When should I not take ACTIMMUNE®?**

Don't use ACTIMMUNE® if you are allergic to interferon-gamma, *E coli*-derived products, or any ingredients contained in the product.

Please see Important Safety Information on pages 5 and 6 and the ACTIMMUNE® Full Prescribing Information and Information for the Patient/Caregiver at [ACTIMMUNE.com](http://ACTIMMUNE.com).

**ACTIMMUNE®**  
(Interferon gamma-1b)

Learn more at [ACTIMMUNE.com](http://ACTIMMUNE.com)

A photograph of a man with glasses and a red sweater talking to a woman with blonde hair. The man is smiling and gesturing with his hands. The woman is looking at him and smiling.

# Working together to help manage CGD

## How Dawn helped her son, Branden, start and stay on ACTIMMUNE® (Interferon gamma-1b)

Individual experiences with ACTIMMUNE® may vary.

“For Branden, taking ACTIMMUNE® was not optional. I told him we had to do it if he wanted to help himself stay out of the hospital,” Dawn said. “Branden hated the hospital, so the idea of spending less time there appealed to him.”

### What are the side effects of ACTIMMUNE®?

The most common side effects with ACTIMMUNE® are flu-like symptoms such as fever, headache, chills, muscle pain, or fatigue, which may decrease in severity as treatment continues. Bedtime administration of ACTIMMUNE® may help reduce some of these symptoms. Acetaminophen may be helpful in preventing fever and headache.

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## Dawn and Branden's ACTIMMUNE® story

Branden was diagnosed with chronic granulomatous disease (CGD) when he was 7 years old. From the beginning, he and his mother, Dawn, made a lifelong commitment to doing everything they could to protect his health. Read their story and discover the challenges they faced and lessons they learned along the way.



### Getting the diagnosis

Branden first experienced symptoms of CGD as a baby. After suffering multiple bouts of pneumonia, along with failure to thrive, he was tested for both cystic fibrosis and dwarfism. The test results were negative, but as he got older, Branden developed new symptoms like staphylococcal infections in his fingertips. Hospital visits became a normal occurrence. Doctors didn't know what to make of his condition, but Dawn never stopped trying to figure it out. Finally, at age 7, Branden was diagnosed with CGD.

"I was so relieved to finally find out what was wrong but devastated to learn there was no cure at the time. I was afraid that every illness would be Branden's last," said Dawn.

\*An infection is serious if you have to go to the hospital and get intravenous (IV) antibiotics.

†Antifungals were not yet available.



### Working to help prevent serious infections

Once he was diagnosed, the priority was keeping Branden as healthy as possible. To reduce his risk of serious infection,\* Branden's doctor prescribed ACTIMMUNE® (Interferon gamma-1b) plus an antibiotic.† Dawn would make sure he was taking his pills every day and would give him his injections. "It made me feel very guilty," Dawn said. "Branden cried for the first several injections and started to hide from me when it was time. He told me he didn't want to do them and even said he hated me."

Despite the many challenges Dawn faced integrating ACTIMMUNE® into Branden's life, including his initial fear of the injections, she never considered stopping the treatment.

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“For Branden, taking ACTIMMUNE® was not optional. I told him we had to do it if he wanted to help himself stay out of the hospital,” Dawn said. “Branden hated the hospital, so the idea of spending less time there appealed to him.”

“In the beginning, I was very resistant because I didn’t fully grasp why I had to take the shots,” Branden said. “But it was made part of my routine whether I liked it or not. As I got older, I finally understood my condition and why I had to take my medication.” While ACTIMMUNE® was appropriate for Branden, other patients should not take it if they are allergic to interferon gamma-1b, *E coli*-derived products, or any ingredients contained in ACTIMMUNE®.

Dawn and Branden set up a Monday, Wednesday, Friday injection routine. If Branden had an activity on one of those days, they would change it to Tuesday, Thursday, Saturday. Branden did experience some flu-like side effects after starting treatment, but Dawn found that giving him ACTIMMUNE® before bed and with a dose of acetaminophen helped to relieve his symptoms. “It took a little practice to get into the new routine, but after time, it was just another thing that we did 3 times a week,” Dawn said.



### Taking over responsibility

Eventually, Dawn decided it was time for Branden to learn how to give his own injections. “I thought, ‘What if something happens to me, and he needs his medication?’” she said. “I was a single parent, and we didn’t have a lot of family support. I knew he had to become responsible for his own care, just in case.”

Branden started self-injecting around age 13, and although Dawn had a tough time passing on the responsibility to her son, Branden was ready to take charge of his treatment. “I wasn’t scared. I just knew I had to do it,” he said. “I was a little nervous on the first one, but after it was done, it wasn’t bad.”

Though Branden started giving his own injections, Dawn was still very active in his treatment routine. For the first couple years, she continued to get the medication out and set it up for him. It wasn’t until he went to college that Branden had full accountability over his CGD treatment. It was then that he started to slip. “I was around 18 or 19 years old. I got tired of giving myself an injection and having to deal with it 3 times a week,” he said.

After a bout of pneumonia caused him to be hospitalized and miss several classes, Branden decided he was going to do everything he could to protect his health, including recommitting to his regular schedule of ACTIMMUNE®. “I realized that 2 minutes out of my day to give myself a shot wasn’t such a big deal if it could potentially protect me from another serious infection or hospitalization.”

“I’m able to live a normal life with CGD as long as I take certain precautions—I just have to be smarter about how I live it. ACTIMMUNE® is an option that can help reduce the risk of serious infections and hospitalization.”



### Shifting the focus

While the results of ACTIMMUNE® treatment are different for everyone, Branden has found that sticking to his treatment regimen and making good choices for his health have kept him free of serious infection since 2006. Branden has graduated from college, earned his master’s degree, and is now happily

married with a successful career in healthcare. Today he still continues the same Monday, Wednesday, Friday injection schedule that he and Dawn established when he first started taking ACTIMMUNE®.

“For me, self-injecting isn’t so bad,” Branden said. “It has given me more autonomy to control my health and my life overall, especially things like going to college, starting a family, and creating a career. I’m able to live a normal life with CGD as long as I take certain precautions—I just have to be smarter about how I live it. ACTIMMUNE® is an option that can help reduce the risk of serious infections and hospitalization. It takes me 2 minutes, 3 times a week. I believe it’s worth it.”

# IMPORTANT SAFETY INFORMATION

## What is ACTIMMUNE® (Interferon gamma-1b) used for?

ACTIMMUNE® is part of a drug regimen used to treat Chronic Granulomatous Disease, or CGD. CGD is a genetic disorder, usually diagnosed in childhood, that affects some cells of the immune system and the body's ability to fight infections effectively. CGD is often treated (though not cured) with antibiotics, antifungals, and ACTIMMUNE.

ACTIMMUNE is also used to slow the worsening of severe, malignant osteopetrosis (SMO). SMO is a genetic disorder that affects normal bone formation and is usually diagnosed in the first few months after birth.

## When should I not take ACTIMMUNE?

Don't use ACTIMMUNE if you are allergic to interferon-gamma, *E coli*-derived products, or any ingredients contained in the product.

## What warnings should I know about ACTIMMUNE?

At high doses, ACTIMMUNE can cause (flu-like) symptoms, which may worsen some pre-existing heart conditions.

ACTIMMUNE may cause decreased mental status, walking disturbances, and dizziness, particularly at very high doses. These symptoms are usually reversible within a few days upon dose reduction or discontinuation of therapy.

Bone marrow function may be suppressed with ACTIMMUNE, and decreased production of cells important to the body may occur. This effect, which can be severe, is usually reversible when the drug is discontinued or the dose is reduced.

Taking ACTIMMUNE may cause reversible changes to your liver function, particularly in patients less than 1 year old. Your doctor should monitor your liver function every 3 months, and monthly in children under 1 year.

In rare cases, ACTIMMUNE can cause severe allergic reactions and/or rash. If you experience a serious reaction to ACTIMMUNE, discontinue it immediately and contact your doctor or seek medical help.

## What should I tell my healthcare provider?

Be sure to tell your doctor about all the medications you are taking.

Tell your doctor if you:

- are pregnant or plan to become pregnant or plan to nurse
- have a cardiac condition such as irregular heartbeat, heart failure, or decreased blood flow to your heart
- have a history of seizures or other neurologic disorders
- have, or have had, reduced bone marrow function. Your doctor will monitor these cells with blood tests at the beginning of therapy and at 3-month intervals on ACTIMMUNE therapy

# IMPORTANT SAFETY INFORMATION (continued)

## **What are the side effects of ACTIMMUNE?**

The most common side effects with ACTIMMUNE are “flu-like” symptoms such as fever, headache, chills, muscle pain, or fatigue, which may decrease in severity as treatment continues. Bedtime administration of ACTIMMUNE may help reduce some of these symptoms. Acetaminophen may be helpful in preventing fever and headache.

## **What other medications might interact with ACTIMMUNE?**

Some drugs may interact with ACTIMMUNE to potentially increase the risk of damage to your heart or nervous system, such as certain chemotherapy drugs. Tell your doctor about all other medications you are taking.

Avoid taking ACTIMMUNE at the same time as a vaccination.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit [www.fda.gov/medwatch](http://www.fda.gov/medwatch), or call 1-800-FDA-1088.

*The risk information provided here is not comprehensive. To learn more, talk about ACTIMMUNE with your healthcare provider or pharmacist. The FDA-approved product labeling can be found at <http://www.ACTIMMUNE.com> or 1-866-479-6742.*

## Horizon Patient Services offers ongoing support for people with CGD

Horizon Patient Services is dedicated to improving the lives of people living with CGD. The Horizon Patient Services program provides ongoing individualized support and education for you and your family.

Your CGD Nurse Educator leads your dedicated Horizon Patient Services team that is here to help you, from answering questions as you start taking ACTIMMUNE® and through every step along the way. Your CGD Nurse Educator is available in person or by email, text, or phone with information and guidance.

These comprehensive services are free of charge and built around 3 components: **coordinate**, **connect**, and **champion**.

### Your Horizon Patient Services team will:



- Work with you and your doctor's office to simplify the process of getting started on your medicine

- Help address financial barriers by researching your insurance benefits, finding out what your insurance will cover, explaining your insurance options, and connecting you to financial assistance options
- Assist in connecting with your specialty pharmacy to schedule the shipment of your medicine so that you avoid running out of supply



- Connect you and your family to others living with CGD through live events, peer-mentor programs, and online resources

- Provide helpful tools and resources to manage the day-to-day challenges of living with CGD
- Introduce you and your family to CGD advocacy groups for more support and inform you of CGD events in your area



- Serve as your dedicated personal resource and the main point of contact for your ongoing ACTIMMUNE® logistical needs

- Provide CGD education and answer non-treatment-related questions
- Help you through changes along the way that may impact your treatment
- Respond to your questions and concerns, and connect you with the right resources to get answers

Visit [ACTIMMUNE.com/support](https://ACTIMMUNE.com/support) to explore all the resources and tools Horizon provides to the CGD community through the Horizon Patient Services program.



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