THIS IS YOUR TIME TO REDUCE THE RISK OF SERIOUS INFECTIONS.

What is ACTIMMUNE® used for?
ACTIMMUNE® (Interferon gamma-1b) 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 6 and 7 and the enclosed ACTIMMUNE® Full Prescribing Information and Information for the Patient/Caregiver.

Learn more at ACTIMMUNE.com
What is CGD?
Chronic granulomatous disease (CGD) is a genetic disorder caused by a defect in the immune system that makes it difficult for the body to fight infection. Because of this, people with CGD are at a higher risk for getting serious, unusual, or repeat bacterial or fungal infections. Their bodies are also more prone to inflammation and the formation of clusters of white blood cells (masses) called granulomas, which give the disease its name.

How ACTIMMUNE® helps in the fight against infection
Now that your doctor has prescribed ACTIMMUNE® (Interferon gamma-1b), it’s important to understand how it works and how it may help you. ACTIMMUNE® is made up of a protein that’s nearly identical to the one the body makes naturally as it fights infections, called interferon gamma. A clinical study proved that ACTIMMUNE® helped people with CGD by reducing the number of serious infections and days spent in the hospital.

Helping you fight serious infections
ACTIMMUNE® has been proven to result in a*:

- **64%** decrease in serious infections†
- **67%** lower risk of serious infection
- **67%** decrease in days in the hospital

*Most patients in a clinical study also received prophylactic antibiotics.
† An infection is serious if you have to go to the hospital and get intravenous (IV) antibiotics.

**Reducing serious infections**
In a study of people with CGD that compared those who were given ACTIMMUNE® to those who were given placebo (inactive substance),† the people who were given ACTIMMUNE® had considerably fewer serious infections, were admitted to the hospital less often, and when they were admitted, spent fewer days in the hospital than those who were not taking ACTIMMUNE®.

‡ More than 85% of the people in both groups were also taking antibiotics.

**Complete your CGD treatment plan**

<table>
<thead>
<tr>
<th>ANTIBIOTICS</th>
<th>ACTIMMUNE®</th>
<th>ANTIFUNGALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fight infections caused by bacteria</td>
<td>Supports the body as it fights infection</td>
<td>Fight infections caused by fungi, such as yeast or mold</td>
</tr>
</tbody>
</table>

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

Please see Important Safety Information on pages 6 and 7 and the enclosed ACTIMMUNE® Full Prescribing Information and Information for the Patient/Caregiver.
Taking your medication

ACTIMMUNE® (Interferon gamma-1b) is taken 3 times a week through an injection given under the skin. It can be injected at home or wherever is convenient for you.

Choosing an injection site

When injecting ACTIMMUNE® it’s important to select a site that’s padded by some fat underneath the skin, like the thighs, back of your upper arm, or abdomen. It’s also recommended that you rotate the site with every injection so that the skin has time to heal.

Recommended injection sites

- Right arm (back and sides)
- Left arm (back and sides)
- Abdomen* (right and left sides)
- Right thigh
- Left thigh

*If you select the abdomen, make sure you inject at least 2 inches away from the belly button.

Select Safety Information

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.

ACTIMMUNE® is most effective when taken consistently as prescribed

It should be taken 3 times a week, at the same time each day.

It may be self-injected or given by a caregiver.

It should be refrigerated and not left at room temperature for longer than 12 hours.

IMPORTANT: Don’t administer ACTIMMUNE® until a healthcare professional has given you detailed instructions and shown you how.

Possible side effects

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 minimize some of these symptoms. Acetaminophen may be helpful in preventing fever and headache.

Free injection training

If you’re hesitant to give yourself or the person you care for injections or just want to make sure you’re injecting correctly, free injection training is offered through the CGD Nurse Educator Program available to ACTIMMUNE® patients.

Select Safety Information

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.

Questions about your injections?

A CGD nurse educator would be happy to assist you. Please call 1 (877) 305-7704 during normal business hours to be connected to a nurse or to schedule an in-home injection training appointment.

Please see Important Safety Information on pages 6 and 7 and the enclosed ACTIMMUNE® Full Prescribing Information and Information for the Patient/Caregiver.
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.

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

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, or call 1-800-FDA-1088. You may also contact the Horizon Pharma Medical Information Department toll-free at 1-866-479-6742 or medicalinformation@horizonpharma.com.

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.
Helping you take charge of your CGD

Starting and staying on treatment is one of the most important ways you can help prevent serious infections related to CGD. With your prescription of ACTIMMUNE® (Interferon gamma-1b), you and your family have access to TranscendRare™, a HorizonCares program that offers a wide range of services at no cost to help you reach your goals for treatment and healthy living.

With TranscendRare, you’ll have a support team that includes a case manager, dedicated nurse educator, and other representatives of Horizon Pharma. Your support team will guide you through every step of your journey—from determining your insurance coverage to receiving treatment, connecting with others living with CGD, and establishing good habits for lifelong health management. You and your family can count on TranscendRare to guide, support, and connect.

A case manager will:
• Work with your doctor’s office to secure any approvals from your insurance company needed to start or continue treatment with ACTIMMUNE®
• Research your insurance benefits and refer you to sources of financial assistance, if needed
• Coordinate with a specialty pharmacy to have ACTIMMUNE® delivered to your home
• Send you emails or texts to remind you when it’s time to refill your prescription
• Help you enroll in a sharps disposal program so you can dispose of injection materials safely
• Make adjustments, as needed, when you experience changes, such as moving or losing a job or insurance

A dedicated CGD nurse educator will:
• Act as your main point of contact for needs related to treatment
• Provide easy-to-understand information about CGD, answer day-to-day questions, and work with you and your family to overcome treatment challenges
• Train you or a family member to give injections of ACTIMMUNE®
• Communicate with your healthcare team to coordinate care

Horizon Pharma will:
• Connect you and your family with communities of people living with CGD and other rare diseases
• Direct you to advocacy groups and other community resources

To learn more, call 1 (877) 305-7704 or visit ACTIMMUNE.com/support.

ACTIMMUNE® is distributed in the US by Horizon Pharma USA, Inc. December 2017 P-ACT-00222

Please see Important Safety Information on pages 6 and 7 and the enclosed ACTIMMUNE® Full Prescribing Information and Information for the Patient/Caregiver.