



Ibritumomab Tiuxetan (Zevalin®)

Pronounce: EYE-bri-TOOM-oh-mab ty-UX-e-tan

Classification: Radiolabeled Monoclonal Antibody

About Ibritumomab Tiuxetan (Zevalin®)

Monoclonal antibodies are created in a lab to attach to the targets found on specific types of cancer cells. The antibody “calls” the immune system to attack the cell it is attached to, causing your immune system to kill the cancer cell.

Ibritumomab Tiuxetan is a synthetic (man-made) antibody used against a protein called CD20, found on the surface of B cells. This manmade antibody has a radioactive isotope attached (called Yttrium-90 or Y-90) to it, which goes into the B cells. The isotope causes damage to the cells by forming free radicals, which damage not only the targeted B cells, but also cells in the nearby area.

How to Take Ibritumomab Tiuxetan

This treatment is given intravenously (IV, into a vein), in combination with the medication [rituximab](#). Your dose depends on your body size, as well as your platelet levels before receiving treatment. You will receive two doses of rituximab, about 1 week apart. The ibritumomab tiuxetan will be given after the second dose of rituximab.

Even when carefully and correctly administered by trained personnel, this medication may cause a feeling of burning and pain at the infusion site. There is a risk that this medication may leak out of the vein at the injection site, causing tissue damage that can be severe. If the area of injection becomes red, swollen, or painful at any time during or after the injection, notify your doctor or nurse immediately. Do not apply anything to the site unless told to do so by your doctor or nurse.

Possible Side Effects of Ibritumomab Tiuxetan

There are a number of things you can do to manage the side effects of ibritumomab tiuxetan. Talk to your care team about these recommendations. They can help you decide what will work best for you. These are some of the most common or important side effects:

Infusion-Related Side Effects

The rituximab infusion can cause a reaction that can cause difficulty breathing, itching, facial swelling, chills, fever, low blood pressure, nausea and vomiting. You will receive Tylenol and diphenhydramine (Benadryl) prior to the rituximab infusion to help prevent these reactions. Reactions are most common during the first rituximab infusion. Notify your doctor or nurse if you have any changes in how you are feeling during the infusion.

Low White Blood Cell Count (Leukopenia or Neutropenia)

White blood cells (WBC) are important for fighting infection. While receiving treatment, your [WBC count can drop](#), putting you at a higher risk of getting an infection. You should let your doctor or nurse know right away if you have a fever (temperature greater than 100.4°F/38°C), sore throat or cold, shortness of breath, cough, burning with urination, or a sore that doesn't heal.

Tips to preventing infection:

- [Washing hands](#), both yours and your visitors, is the best way to prevent the spread of infection.
- Avoid large crowds and people who are sick (i.e.: those who have a cold, fever or cough or live with someone with these symptoms).
- When working in your yard, wear protective clothing including long pants and gloves.
- Do not handle pet waste.
- Keep all cuts or scratches clean.
- Shower or bathe daily and perform frequent [mouth care](#).
- Do not cut cuticles or ingrown nails. You may wear nail polish, but not fake nails.
- Ask your oncology care team before scheduling dental appointments or procedures.
- Ask your oncology care team before you, or someone you live with, has any vaccinations.

Stevens-Johnson Syndrome and Other Serious Skin Reactions

Stevens-Johnson Syndrome is a rare, but serious, allergic reaction that affects the skin and mucous membranes. It typically starts as a rash or painful blisters, and can progress to serious damage to the skin, and in some cases, death. Other serious skin reactions have also been reported after treatment with this medication, such as erythema multiforme, toxic epidermal necrolysis, bullous dermatitis, and exfoliative dermatitis. These skin reactions can happen a few days to up to 4 months after the infusion. It is important that you report any rash, other skin changes or discomfort to your healthcare providers right away.

Low Platelet Count (Thrombocytopenia)

Platelets help your blood clot, so when the [count is low](#) you are at a higher risk of bleeding. Let your oncology care team know if you have any excess bruising or bleeding, including nose bleeds, bleeding gums or blood in your urine or stool. If the platelet count becomes too low, you may receive a transfusion of platelets.

- Do not use a razor (an electric razor is fine).
- Avoid contact sports and activities that can result in injury or bleeding.
- Do not take aspirin (salicylic acid), non-steroidal, anti-inflammatory medications (NSAIDs) such as Motrin/Advil (ibuprofen), Aleve (naproxen), Celebrex (celecoxib) etc. as these can all increase the risk of bleeding. Please consult with your healthcare team regarding use of these agents and all over the counter medications/supplements while on therapy.
- Do not floss or use toothpicks and use a soft-bristle toothbrush to brush your teeth.

Low Red Blood Cell Count (Anemia)

Your red blood cells are responsible for carrying oxygen to the tissues in your body. When the [red cell count is low](#), you may feel tired or weak. You should let your oncology care team know if you experience any shortness of breath, difficulty breathing or pain in your chest. If the count gets too low, you may receive a blood transfusion.

Fatigue

[Fatigue](#) is very common during cancer treatment and is an overwhelming feeling of exhaustion that is not usually relieved by rest. While on cancer treatment, and for a period after, you may need to adjust your schedule to manage fatigue. Plan times to rest during the day and conserve energy for more important activities. Exercise can help combat fatigue; a simple daily walk with a friend can help. Talk to your healthcare team for helpful tips on dealing with this side effect.

Live Vaccines

You, or anyone you live with, should avoid having live or live-attenuated vaccines while receiving this medication. These include herpes zoster (Zostavax) for shingles prevention, oral polio, measles, nasal flu vaccine (FluMist®), rotavirus and yellow fever vaccines.

Important but Less Common Side Effects

- **Secondary Cancers:** A secondary cancer is one that develops as a result of cancer treatment for another cancer. This is quite rare, but you should be aware of the risk. In most cases, a secondary cancer related to chemotherapy is a blood cancer (leukemia, myelodysplastic syndrome [MDS]). This can happen years after treatment. This is most often associated with repeated treatments or high doses. Your provider will monitor your labs closely. Consider having a complete blood count with differential checked each year by your healthcare provider if you received high risk therapies.

Sexual & Reproductive Concerns

This medication may affect your reproductive system, resulting in the menstrual cycle or sperm production becoming irregular or stopping permanently. Women may experience menopausal effects including hot flashes and vaginal dryness. In addition, the desire for sex may decrease during treatment. You may want to consider sperm banking or egg harvesting if you may wish to have a child in the future. Discuss these options with your oncology team.

Exposure of an unborn child to this medication could cause birth defects, so you should not become pregnant or father a child while on this medication. Effective birth control is necessary during treatment and for at least 12 months after treatment. Even if your menstrual cycle stops or you believe you are not producing sperm, you could still be fertile and conceive. You should not breastfeed while receiving this medication and for at least 6 months after treatment.

OncoLink is designed for educational purposes only and is not engaged in rendering medical advice or professional services. The information provided through OncoLink should not be used for diagnosing or treating a health problem or a disease. It is not a substitute for professional care. If you have or suspect you may have a health problem or have questions or concerns about the medication that you have been prescribed, you should consult your health care provider.