

## Zevalin<sup>®</sup> (Yttrium - 90 Ibritumomab Tiuxetan)

### What is Zevalin<sup>®</sup>?

Zevalin<sup>®</sup> is a treatment for certain types of Non-Hodgkin's lymphomas that uses an antibody joined to a radioactive substance called yttrium.

The antibody is a version of an immune system protein that is designed to lock onto a certain receptor (CD20) found on a type of white blood cell called B lymphocytes. This receptor can be found on some normal lymphocytes and lymphocytes that are cancerous, as in Non-Hodgkin's lymphoma. Once attached to the receptor, the radiation in the antibody kills the cell. Zevalin<sup>®</sup> treatment works best if Rituximab (Rituxan<sup>®</sup>), another antibody, is given first.

### How Will I Receive Zevalin<sup>®</sup>?

Zevalin<sup>®</sup> is given as an injection into your vein (intravenously). It is very important that you do not miss scheduled treatments. If you miss a scheduled treatment, the treatment process will need to be restarted from the beginning.

#### **Day 1: Rituxan<sup>®</sup> Infusion**

You will receive an intravenous infusion of Rituxan<sup>®</sup> in the Infusion Room over several hours.

#### **Day 7, 8, or 9: Rituxan<sup>®</sup> and Zevalin<sup>®</sup> Infusion**

You will receive another infusion of Rituxan<sup>®</sup> in the Infusion Room. After receiving the Rituxan<sup>®</sup>, you will go to Medical Imaging, to receive Zevalin<sup>®</sup>. Zevalin<sup>®</sup> is administered by an intravenous infusion that is completed in about 10 minutes.

### What Radiation Precautions are Necessary After Receiving Zevalin<sup>®</sup>?

After the Day 7, 8, or 9 infusion of Zevalin<sup>®</sup>, you will need to take the precautions outlined below. Radiation from Zevalin<sup>®</sup> does not escape outside the body, but a small amount of radiation may be present (for about a week following treatment) in body fluids, such as blood and urine. In general, it is not necessary to avoid contact with friends or family during this time and isolation is not required. You will be given a radiation information "Travel Card" after receiving the Zevalin<sup>®</sup> infusion. You should keep the card with you anywhere you travel for one month following the Zevalin<sup>®</sup> infusion. You should also follow these guidelines:

For **three days** after the Zevalin<sup>®</sup> infusion:

- Spilled urine or other body fluids should be cleaned up and flushed down the toilet or placed in a plastic bag in the household trash.
- Wash your hands thoroughly after using the bathroom.

For **seven days** after the Zevalin<sup>®</sup> infusion:

- Use a condom during sexual intercourse.
- Avoid deep kissing. A quick "peck" is acceptable.

For **twelve months** after the Zevalin<sup>®</sup> infusion:

- Do not conceive a child (get pregnant) while taking Zevalin<sup>®</sup> or for 12 months after. Please discuss with your doctor or nurse when you may safely conceive a child. You should discontinue breast feeding while taking Zevalin.

### What are the Common Side Effects?

Please see “Coping with Symptoms and Common Problems” in the Patient Care Manual and refer to the Symptom Management section for additional information on side effects.

What You May Expect	What You Should Do
<p><b>Allergic reactions</b> may occur, especially during the first treatment. Signs of allergic reactions can include trouble breathing, tightness or swelling in the mouth or throat, itchy welts on the skin, feeling lightheaded or dizzy (due to low blood pressure), chest pain, irregular heartbeat, and coughing.</p>	<ul style="list-style-type: none"> <li>• Notify your nurse or doctor if you have any signs of allergic reaction.</li> </ul>
<p><b>Skin reaction</b> may occur. Signs of skin reaction can include a skin rash with redness or blistering in the mouth, nose, eyes, and skin.</p>	<ul style="list-style-type: none"> <li>• Report any signs of skin rash, redness, blistering in the mouth, nose, eyes, skin, or fever and body aches to your doctor or nurse.</li> </ul>
<p><b>Flu-like illness</b> may occur. Signs of flu-like illness include fever and body aches.</p>	<ul style="list-style-type: none"> <li>• Report any signs of flu-like illness to your doctor or nurse.</li> </ul>
<p><b>Nausea and vomiting</b> may occur. Most people have little or no nausea.</p>	<ul style="list-style-type: none"> <li>• You may be given a prescription for an anti-nausea drug(s) to take at home. It is easier to prevent nausea than to treat it once it has occurred.</li> <li>• Drink plenty of liquids.</li> <li>• Eat and drink often and in small amounts.</li> </ul>
<p><b>Decreased blood counts</b> (lowered platelet, red and white blood cells) may occur. Blood counts generally reach their lowest point 4-6 weeks after Zevalin<sup>®</sup> therapy, and generally recover by 8-9 weeks after therapy. You may feel weak and tired. You may develop infections more easily and may bruise more easily. Your health care providers will test your blood frequently to monitor your blood counts.</p>	<ul style="list-style-type: none"> <li>• Report any signs of infection, fever, unusual bleeding, or bruising.</li> <li>• Do not get any immunizations (vaccines) either during or after treatment with this drug without your doctor’s OK. Avoid contact with people who have recently received a live virus vaccine, such as the oral polio vaccine or smallpox vaccine.</li> </ul>

### Call and Seek Help Immediately If You Experience:

- Shortness of breath, chest pain, or discomfort
- Swelling of your lips or throat
- Confusion

### Contact Your Nurse or Doctor If You Have:

- Fever of 100.9<sup>0</sup> F or 38.3<sup>0</sup> C or higher
- Chills
- Unusual bruising or bleeding
- Nausea or vomiting that interferes with your ability to eat and that is unrelieved with medication
- Signs of skin reactions including skin rash with redness or blistering in the mouth, nose, eyes, or skin

### Special Instructions:

- For one month after receiving the Zevalin<sup>®</sup> infusion carry the radiation information Travel Card given to you.
- Do not conceive a child (get pregnant) while taking Zevalin<sup>®</sup> and for 12 months after. Please discuss with your doctor or nurse when you may safely conceive a child.
- Do not breast feed while taking Zevalin<sup>®</sup>.

### Drug-Drug Interactions

Any drugs or supplements that interfere with blood clotting can raise the risk of bleeding during treatment with Zevalin<sup>®</sup>. These include:

- Vitamin E
- Non-steroidal anti-inflammatory drugs (NSAIDS) such as aspirin, ibuprofen (Advil, Motrin<sup>®</sup>) and naproxen (Aleve, Naprosyn<sup>®</sup>)
- Warfarin (Coumadin<sup>®</sup>)
- Ticlopidine (Ticlid<sup>®</sup>)
- Clopidogrel (Plavix<sup>®</sup>)

Note that many cold, flu, fever, and headache remedies contain aspirin or ibuprofen. Ask your pharmacist if you aren't sure what is in the medicines you take.

No other serious interactions are known at this time. Check with your doctor, nurse, or pharmacist about your other medicines, herbs, supplements, and whether alcohol can cause problems with this medicine.

### Drug-food Interactions

No serious interactions with food are known at this time.

For more complete information, please request an additional teaching sheet from the National Library of Medicine at [www.nlm.nih.gov/medlineplus/druginformation.html](http://www.nlm.nih.gov/medlineplus/druginformation.html), your nurse, or pharmacist.

### Zevalin<sup>®</sup> Treatment Schedule

Patient Name: \_\_\_\_\_ MRN: \_\_\_\_\_

Physician: \_\_\_\_\_

Clinical Nurse Coordinator Name: \_\_\_\_\_

Nurse Contact Information: \_\_\_\_\_

Treatment Day	Treatment Plan	Average Appointment Duration	Location	Date/Time
Day 1	Rituxan® Infusion	4 Hours	5 <sup>th</sup> Floor Infusion	
Day 8	Rituxan® Infusion	3-4 Hours	5 <sup>th</sup> Floor Infusion	
	Zevalin® Infusion	1 Hour	2 <sup>nd</sup> Floor Medical Imaging	

### Example of Radiation Information Travel Card

Small amounts of radiation in the body can be detected by monitors at border crossings, airports, or on ferries. After receiving the infusion of Zevalin®, you will be given a Travel Card, similar to the example below. The Nuclear Medicine Technologist will fill out the information on the card. Carry this card with you at all times for 30 days after the Zevalin® infusion. The card can be shown to officials at border crossings, or on ferries. The officials may contact the phone number listed on the card for verification, if needed.



Medical Imaging  
825 Eastlake Ave E  
Seattle, WA 98109

Date _____
Patient Name _____
DOB _____

This patient had a nuclear medicine procedure and may still have small amounts of radiation capable of detection by radiation monitoring equipment. This amount of radiation poses no danger to the public and is allowed by the State of Washington medical use regulations.

Procedure \_\_\_\_\_ Administered date: \_\_\_\_\_

Administered radionuclide: **Tc-99m** **I-131** **Tl-201** **Y-90** Other: \_\_\_\_\_ Amount \_\_\_\_\_ mCi

Half-life \_\_\_\_\_

Suggested period of detection: (check one):

- Short T  $\frac{1}{2}$ : 3 days |
- Medium T  $\frac{1}{2}$ : 1 month
- Long T  $\frac{1}{2}$ : 2 months

*If verification is needed, please call:*

*Mon-Fri 8:00 AM – 5PM: 206-288-7045*

*Evenings and weekends: 206-598-6190*

*Ask to page the radiology resident*

Technologist: \_\_\_\_\_

*Knowledge is Power*  
SCCA Patient and Family Education Department