## Chemocare.com

Care During Chemotherapy and Beyond

## **Xofigo®**

Generic Name: Radium 223 Dichloride

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Trade Name(s): Xofigo®

Radium 223 Dichloride is the generic name for the trade name drug Xofigo®. In some cases, health care professionals may use the trade name Xofigo® when referring to the generic drug name radium 223 dichloride.

#### **Drug Type:**

Xofigo® is an alpha particle-emitting radioactive therapeutic agent. This medication is classified as a "radiopharmaceutical". (For more detail, see "How Xofigo® Works" below)

### What Xofigo® Is Used For:

The treatment of patients with prostate cancer that is resistant to medical or surgical treatments that lower testosterone and has spread to bones with symptoms, but not to other parts of the body.

Note: If a drug has been approved for one use, physicians may elect to use this same drug for other problems if they believe it may be helpful.

### How Xofigo® Is Given:

- Xofigois given through a vein (intravenously, IV), as a slow [intravenous] injection, over about 1 minute.
- There is no pill form of Xofigo®.
- It is given in a clinic or facility where healthcare providers or technicians have been trained to give radiation therapy.
- It is given once every 4 weeks for a maximum of 6 doses.

The amount of Xofigo® that you will receive depends on many factors, including your weight, and your general health or other health problems. Your doctor will determine your exact dosage and schedule.

#### Side Effects:

Important things to remember about the side effects of Xofigo®:

- Most people will not experience all of the Xofigo® side effects listed.
- Xofigo® side effects are often predictable in terms of their onset, duration, and severity.
- Xofigo® side effects will improve after therapy is complete.
- Xofigo® side effects may be quite manageable. There are many options to minimize or prevent the side effects of Xofigo®.

# The following side effects are common (occurring in greater than 10%) for patients taking Xofigo®:

- Nausea
- Vomiting
- Diarrhea
- Swelling of the lower legs and hands [peripheral edema]
- Low blood counts. Your white and red blood cells and platelet counts may temporarily decrease. This can put you at increased risk for infection, anemia and/or bleeding.

#### These are less common (occurring in 1-5%) side effects for patients receiving Xofigo®:

- Dehydration
- Injection site reactions (redness, pain, swelling)
- Kidney failure / impairment

Not all side effects are listed above. You should always inform your health care provider if you experience any unusual symptoms.

## When to contact your doctor or health care provider:

Contact your health care provider immediately, day or night, if you should experience any of the following symptoms:

• Fever of 100.4° F (38° C) or higher, chills (possible signs of infection)

The following symptoms require medical attention, but are not an emergency. Contact your health care provider within 24 hours of noticing any of the following:

- Nausea (interferes with ability to eat and unrelieved with prescribed medication)
- Vomiting (vomiting more than 4-5 times in a 24 hour period)
- Diarrhea (4-6 episodes in a 24-hour period)
- Unusual bleeding or bruising
- Black or tarry stools, or blood in your stools
- Extreme fatigue (unable to carry on self-care activities)

Always inform your health care provider if you experience any unusual symptoms.

#### **Precautions:**

• Before starting Xofigo® treatment, make sure you tell your doctor about *any* other medications you are taking (including prescription, over-the-counter, vitamins, herbal remedies, etc.). Do

not take aspirin, products containing aspirin unless your doctor specifically permits this.

- Xofigo® is not currently indicated for use in women. However, if Xofigo® is given to a woman, getting pregnant should be avoided and the woman should not breast feed. Pregnancy category X (Xofigo® may cause fetal harm when given to a pregnant woman). This drug must not be given to a pregnant woman or a woman who intends to become pregnant. If a woman becomes pregnant while taking Xofigo®, the medication must be stopped immediately and the woman given appropriate counseling).
- Because of potential negative effects on the development of sperm cells associated with radiation, men who are sexually active should use condoms as well as have their female partners of reproductive potential to use a highly effective contraceptive method during treatment and for at least 6 months after completing treatment with Xofigo®.
- It is not known what effects Xofigo® has on human fertility. There is a potential risk that radiation by Xofigo® could impair fertility.
- It is important to tell your doctor if you are incontinent (unable to control) urine or stool.

#### Self-Care Tips:

- Keep your body fluids from coming in contact with family members or caregivers. Use gloves when touching body fluids.
- Drink at least two to three quarts of fluid every 24 hours, unless you are instructed otherwise.
- You may be at risk of infection so try to avoid crowds or people with colds, and report fever or any other signs of infection immediately to your health care provider.
- Use an electric razor and a soft toothbrush to minimize risk of bleeding.
- · Avoid contact sports or activities that could cause injury.
- To reduce nausea, take anti-nausea medications as prescribed by your doctor, and eat small, frequent meals.
- Follow regimen of anti-diarrhea medication as prescribed by your health care professional.
- Eat foods that may help reduce diarrhea (see managing side effects diarrhea).
- Drink at least two to three quarts of fluid every 24 hours, unless you are instructed otherwise.
- In general, drinking alcoholic beverages should be kept to a minimum or avoided completely. You should discuss this with your doctor.
- · Get plenty of rest.
- Maintain good nutrition.
- If you experience symptoms or side effects, be sure to discuss them with your health care team. They can prescribe medications and/or offer other suggestions that are effective in managing such problems.

#### Bathroom hygiene is important:

Radioactivity is present in urine and stool after treatment. Be sure to practice good personal
hygiene while on treatment with Xofigo® and for at least 1 week after the last injection. If
incontinent of urine (unable to hold urine) a catheter might be necessary temporarily. If,
incontinent of stool (unable to control bowel movements) this could be a contraindication for
this type of therapy.

- After going to the bathroom, be sure to wash your hands thoroughly and flush the toilet several times.
- Promptly clean up spilled bodily waste, wearing gloves when you clean. Dispose of gloves as directed by the healthcare provider who gave you your Xofigo® treatment. Wash your hands when you are finished.
- Wash soiled clothing right away and wash separately from other clothing.

#### Monitoring and Testing:

You will be checked regularly by your doctor while you are taking Xofigo®, to monitor side effects and check your response to therapy. Periodic blood work will be obtained to monitor your complete blood count (CBC) as well as the function of other organs (such as your kidneys and liver) these tests will be ordered by your doctor.

#### How Xofigo® Works:

Xofigo® is a type of radiopharmaceutical. Radiopharmaceuticals are radioactive drugs. Radiopharmaceuticals are used in the field of nuclear medicine as radioactive tracers in the diagnosis and treatment of many diseases. A radioactive tracer is a chemical compound with an attached radioactive isotope [a variant of a chemical element] that can be introduced into and tracked within the body. Through a complex process, these radioactive isotopes undergo radioactive decay, resulting in the emission of particles such as alpha or beta particles. Radioactive isotopes are used primarily either for their chemical properties or as a source of radiation. Radionuclides of similar elements can serve as radioactive tracers because they are similar chemically to the non-radioactive elements. There are some radionuclides that are bone seeking radioisotopes and those radionuclides exhibit chemical behavior similar to calcium, allowing them to be absorbed in areas where cancer is present in the bone. Once in the bone, the radioisotope emits beta or alpha particles, which kill the nearby cancer cells.

Xofigo® is an alpha-particle emitting radio isotope [radium-223 dichloride]. The drug mimics calcium and forms complexes with the bone mineral at sites of bone metastases. It then emits alpha particles, causing the destruction of DNA in nearby cells, resulting in cancer cell death in the bone.

**Note:** We strongly encourage you to talk with your health care professional about your specific medical condition and treatments. The information contained in this website is meant to be helpful and educational, but is not a substitute for medical advice.

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