Octreotide (Sandostatin®, Sandostatin LAR®)

Pronounced: ok-TREE-oh-tide

Classification: Somatostatic Agent

About Octreotide (Sandostatin®, Sandostatin LAR®)

Octreotide is a hormone that occurs naturally in the body. It is used to treat carcinoid syndrome, which is seen in patients with carcinoid or neuroendocrine tumors. These tumors cause the body to overproduce certain hormones, and these hormones in turn can lead to symptoms collectively known as "carcinoid syndrome". Common symptoms include flushing (90% of patients), diarrhea (75%), abdominal cramping (51%), and abnormalities of the heart valves (53%), possibly leading to right heart failure. Octreotide works to reduce the production of these hormones and thereby decrease the symptoms.

How to Take Octreotide

The short-acting form of octreotide is given as a subcutaneous injection (injection under the skin) or in an intravenous (IV) form. The dosage is dependent on how your body responds and is given several times a day. For chronic treatment, patients typically receive the short-acting form initially, and if this results in a decrease in their symptoms, switch to the long-acting form for convenience.

The long-acting formulation, Sandostatin LAR, is octreotide contained in "microspheres", which allow the drug to be slowly released into the body over a 4-week period. This allows the patient to receive only one injection a month at their doctor's office. This injection is given into the muscle (intramuscularly or IM). You may receive the short-acting form for several weeks after starting the LAR form while the LAR reaches therapeutic levels. Some patients may still use the short-acting form to control "breakthrough symptoms" (symptoms that may occur occasionally while on the LAR form).

This medication can interact with other medications, including cyclosporine, insulin, oral diabetic medications, and many cardiac medications. Be sure to tell your healthcare provider about all medications and supplements you take.

Possible Side Effects of Octreotide

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

Pain at the Injection Site

Pain, redness, or swelling may occur at the injection site. This typically lasts less than 10-15 minutes after the short-acting form and an hour after the LAR form. To reduce this side effect, the medication will be removed from the refrigerator ahead of time and allowed it to reach room temperature. Also, rotating the site of the injections is helpful.

Abdominal Side Effects

Side effects such as diarrhea, bloating, gas, and abdominal pain were reported in studies. It is difficult to tell if these are related to the medication or the disease, so discuss them with your doctor or nurse. These side effects may be decreased by giving the injections between meals or at bedtime. The LAR form is less likely to cause these side effects, and they typically stop within 1-4 days of the injection and decrease with long-term treatment.

Nausea and/or Vomiting

Talk to your oncology care team so they can prescribe medications to help you manage nausea and vomiting. In addition,
dietary changes may help. Avoid things that may worsen the symptoms, such as heavy or greasy/fatty, spicy or acidic foods (lemons, tomatoes, oranges). Try saltines, or ginger ale to lessen symptoms.

Call your oncology care team if you are unable to keep fluids down for more than 12 hours or if you feel lightheaded or dizzy at any time.

**Gallstones**
This medication can affect your gall bladder and cause gallstones or biliary abnormalities (including jaundice) in patients who use it over a long period of time. Report any symptoms of sudden abdominal pain, fever, nausea/vomiting, tea-colored urine, light-colored stools, or yellowing of the eyes or skin to your health care provider.

**Heart Problems**
This medication may cause slow or abnormal heartbeats or sinus bradycardia. Notify your oncology care team right away if you feel abnormal heartbeats or if you feel dizzy or faint.

**Blood Sugar Changes (Hypo/Hyperglycemia)**
This medication can cause lowered or elevated blood sugar levels in patients with and without diabetes. Your healthcare team will monitor your blood sugar. If you develop shakiness, nervousness, anxiety, sweating, chills, clamminess, rapid/fast heartbeat or headaches (symptoms of low blood sugar) or develop increased thirst, urination or hunger, blurry vision, headaches, or your breath smells like fruit (symptoms of high blood sugar) notify your healthcare team. Diabetics should monitor their blood sugar closely and report elevations to the healthcare team.

**Less common but important side effects can include:**

- **Thyroid Problems:** This medication can cause hypothyroidism (underactive thyroid). Your healthcare provider will perform blood tests to check the function of your thyroid and treat this side effect if it develops. Symptoms of thyroid problems include: tiredness, feeling hot or cold, change in your voice, weight gain or loss, hair loss, and muscle cramps. Report any of these symptoms to your oncology care team.