

Temsirolimus

Names	The generic drug name is temsirolimus (tem sir OH li mus) . The brand name is Torisel ®. There may be other names for this medication.
How Do I Take This Medication?	Your medication will be given by infusion (slow injection into a vein) over 30 to 60 minutes, usually once a week.
Why Am I Taking Temsirolimus?	This drug is used to treat advanced renal cell (kidney) cancer.
How Does It Work?	<p>Traditional chemotherapy drugs identify cancer cells by their rapid rate of reproduction, and then attack those cells. Unfortunately, normal cells that naturally reproduce rapidly are also affected.</p> <p>Temsirolimus is designed to work differently. As an mTOR (mammalian target for rapamycin) inhibitor, it interferes with the master switch in the cells that controls growth and reproduction. Although mTOR is found in all your cells, it is particularly important to cancer cells that aggressively invade nearby tissues. By interfering with the master switch of these cancer cells, growth and reproduction are interrupted, and the cells die.</p> <p>Temsirolimus also reduces levels of growth factors that the tumor needs to create new blood vessels. By blocking the creation of these new blood vessels (a process called antiangiogenesis), the tumor is deprived of needed oxygen and nutrients, ultimately causing the cells to starve.</p>
What Should I Tell My Doctor Before I Begin?	<p>Tell your doctor if you:</p> <ul style="list-style-type: none">• are allergic to temsirolimus, everolimus, sirolimus, or polysorbate 80• have or have ever had diabetes, high cholesterol, high triglycerides, kidney disease, a brain or spinal cord tumor, any type of cancer, liver disease, or lung disease• may have any type of infection• are taking any herbal products, especially St. John's wort• are pregnant or breastfeeding

This drug may interact with other medications besides those listed or cause harmful side effects. Tell your doctor and pharmacist about all prescription or over-the-counter medications, vitamins, herbal, or diet supplements that you are taking.

What Are Some
Possible Side Effects?

- Bone marrow depression: Low levels of white blood cells, red blood cells, and platelets can increase your risk for infection, anemia/fatigue, and bleeding
- Weakness (more common), fatigue, or sleep problems
- Rash or dry skin (more common), nail thinning
- Mouth sores or swelling
- Abnormal blood test results: liver enzymes, cholesterol, blood sugar (glucose), and creatinine levels may be high, and phosphorus level be low
- Loss of appetite (more common), changes in your sense of taste
- Nausea (more common), vomiting

Less Common

- Diarrhea or constipation
- Swelling of eyes, hands, feet, ankles, or lower legs
- Weight loss
- Aches and pains, headache
- Infection, fever, chills, and/or shaking
- Cough, shortness of breath, chest pain
- Nosebleeds

How Can I Manage
These Side Effects?

- To help avoid infections, stay away from crowds or people with colds or other infections. Wash your hands often. Talk to your doctor before you have any vaccinations, such as a flu shot.
- If you are fatigued, take rests during the day, limit your activities, and do an activity at a time of day when you feel a bit more energetic. Learn to ask for and accept help with household and daily chores.
- Be careful when handling sharp objects. Avoid rough sports or other situations that could cause bruising or injury. Use an electric razor.
- Skin care: Use a sunblock with SPF 30 or higher that protects against both UVA and UVB rays when you are outdoors, even if it is just for a short time. Keep your neck, chest, and back covered. Wear sunglasses and protective clothes (brimmed hat, long sleeves, etc.) when in the sun. Do not use tanning beds. If you develop a rash, keep the area clean and dry and check with your doctor before using any creams or ointments on the area.

- To minimize mouth problems, rinse your mouth with a mixture of ½ tsp of baking soda in 8 oz of water after every meal and at bedtime. Brush your teeth and gums often with a soft toothbrush. (Soften it further by running it under warm water). Avoid smoking, alcohol, and mouthwashes that contain alcohol. Use saliva substitute and apply lip moisturizer, if needed. If your mouth is irritated, use topical or local agents such as Orajel or Zilactin-B, and apply generously. You can use equal parts of xylocaine viscous solution, Zovirax® (alcohol-free), and Maalox® (or Mylanta®). Swish the mixture around in your mouth and then spit it out. You can use this rinse every 2-4 hours as needed. Ice chips, drinking plenty of water, and rinsing your mouth with an alcohol-free mouthwash may help with a dry mouth.
- **Loss of appetite:** Stay active - try to take a short walk every day. Have a healthy snack every few hours instead of 3 large meals. Avoid foods with strong smells. Try a small amount of food on a small plate and eat foods at room temperature (not very hot or cold). Eat and snack on a schedule – even if you don’t feel hungry. Choose high protein, high calorie foods. Add protein powder to foods. Choose moist or smooth foods such as pureed fruits – avoid spicy, greasy, heavy foods and foods high in salt or sugar.
- **Taste Changes:** Experiment with your diet to find foods that taste tolerable. Use plastic utensils if you have a metallic taste in your mouth. Try cold or room temperature foods instead of hot foods.
- **Nausea, vomiting:** To help prevent nausea, avoid fried, spicy, and fatty foods on the days you receive chemo and for 2-3 days afterwards. Eating small, frequent meals may help. If you have nausea, try foods and drinks that are ‘easy on the stomach’ - bland foods, ginger ale, dry crackers, and toast.
- **Diarrhea:** Loperamide (Imodium®) is available over the counter. You can take 2 tablets after the first episode of diarrhea, followed by 1 tablet (2mg) after each loose stool as needed. Do not take more than 8 tablets (16mg) in a 24-hour period. Call the clinic if this does not provide relief within 24 hours.
- **Constipation:** To help prevent constipation, add high fiber foods such as fruits, vegetables, and whole grains to your diet and, if possible, keep moving throughout the day. If you do not move your bowels in 2-3 days, you will need to take a laxative. A suggested laxative is Senna-S (contains senna plus docusate), which is available over the counter. If not better in 2 days, call the clinic.

- **Edema:** To help prevent edema, do not stand for long periods of time. Keep your legs elevated when sitting or lying down. Avoid wearing tight-fitting clothing and shoes. Weigh yourself often. Contact your provider if the swelling becomes painful, limits your ability to walk or care for yourself, or if you gain more than 5 pounds in 1 week.
- **Nosebleed prevention:** Keep nostrils moist by using a humidifier or not increasing the temperature too high at home.
- **Aches, pains, headaches, cough:** Check with your doctor before taking any medication or product for these or any other side effect.
- To help avoid dizziness when you change positions quickly, get out of bed slowly. Rest your feet on the floor for a few minutes before you stand up.

When Should I Call the Doctor?

Call 911 or go to the nearest hospital emergency department if you have any life-threatening symptoms such as :

- signs of an allergic reaction: itching, hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing, dizziness, or fast/pounding heartbeat (palpitations)

Call your doctor immediately if you have:

- signs of infection: Fever of 100.4°F (38°C) or higher, chills, cough, sore throat, pain or burning upon urination; redness or tenderness along a vein, at an IV site, or at any other wound or skin irritation
- unusual bruising or bleeding: Bleeding lasts more than 10-15 minutes or that causes dizziness; black or bloody stools; vomit that is bloody or that looks like coffee grounds; blood in your urine or mucus, nosebleeds, or superficial bleeding into the skin that appears as a rash of pinpoint-sized reddish-purple spots (petechiae)

Call your doctor as soon as possible if you have:

- nausea or vomiting that does not respond to prescribed medication or that prevents you from eating or drinking
- mouth sores that prevent you from eating or drinking
- more than 4-5 episodes of diarrhea or vomiting in 24 hours
- signs of dehydration: tiredness, thirst, dry mouth, dark and decrease amount of urine, or dizziness
- extreme fatigue (unable to care for yourself)