

# Mitomycin

## Names

The generic drug name is mitomycin (mye-toe-MYE-sin).  
Mutamycin® and Mitosol® are brand names. There may be other names for this medication,

## Why Am I Receiving Mitomycin?

This medication is used to treat anal, bladder, breast, cervical, colorectal, head and neck, pancreas, stomach, and non-small cell lung cancers.

## How is it Administered?

This medicine is given by infusion into a vein (intravenously/IV). When used to treat bladder cancer, it is delivered directly into the bladder through a catheter. (The catheter is inserted through the urethra (the tube which carries urine from the bladder to the outside the body) into the bladder. Once the medication is in place, the catheter is removed. The medication is held in the bladder for about 2 hours, after which, the patient urinates and empties their bladder.

## How Does It Work?

Cancer is a group of diseases in which abnormal cells divide (reproduce) without control. Both normal and cancer cells go through cycles that include a resting, growing, and division (reproduction) phases. Your chemotherapy (chemo) schedule is based upon the type of cancer you have, the rate at which the cancer cells divide, and the times when each drug is the most likely to be effective. This is why chemo is typically given in cycles.

The faster cells are reproducing, the more likely it is that chemo will damage/kill them. Unfortunately, normal cells that reproduce quickly are often affected including cells that line the digestive tract (mouth, stomach, and intestines), hair follicles, and blood cells. These normal cells will eventually grow back and be healthy. During treatment, however, you may have side effects

Mitomycin is a type of antibiotic that is only used to treat cancer. It interferes with the cells during certain phases of the cell cycle and slows or stops the growth of cancer.

What Should I Tell My Doctor Before I Begin?

Tell your doctor if you:

- have ever had an allergic reaction to mitomycin or have allergies
- have a bleeding or blood-clotting problem, or have noticed any unusual bruising or bleeding
- have ever had kidney disease
- have ever received doxorubicin (Adriamycin®)
- are pregnant or breastfeeding

**This drug may interact with other medications 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?

- Low blood counts: Low levels of white blood cells, red blood cells, and/or platelets, which can increase your risk for infection, fatigue, and/or bleeding
- Mouth or throat sores
- Loss of appetite, nausea, or vomiting (usually mild)
- Fatigue
- Diarrhea
- Thinned or brittle hair, hair loss
- Bladder inflammation (if you have the medication put directly into the bladder to treat bladder cancer)

How Can I Manage These Side Effects?

- Drink about ten 8-ounce glasses of fluid and urinate frequently for the first 24 hours after a treatment. After the first 24 hours, drink 2-3 quarts of fluids (especially water) every day (unless your doctor has restricted your fluids) , and urinate at least once every 6 hours.
- To help avoid infections, stay away from crowds or people with colds, flu, or other infections, wash your hands often, and talk to your doctor before you have any vaccinations (immunizations), such as a flu shot.
- If you are fatigued, take rests during the day, and limit your activities to the time of day when you have the most energy. Learn to ask for and accept help with household chores.
- If your platelet count is low, be careful when handling sharp objects; stay away from rough sports or other situations where you could be bruised, cut, or injured; and use an electric razor.

- Mouth care is very important while taking this drug. Rinse your mouth with a mixture of ½ tsp of baking soda in 8 ounces 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 before brushing.) Avoid smoking, alcohol, and mouthwashes that contain alcohol. If your mouth hurts, try to eat soft foods, and avoid eating salty foods.
- Small, frequent meals may help with nausea. Avoid spicy and fried foods. IF nausea is a problem, talk to your doctor about medication to help prevent or lessen it.
- Talk to your doctor before using over-the-counter antidiarrheal medicine.
- Some people cut their hair for their own comfort once it begins to fall out. Hair will grow back when treatment ends, though it may be a different color or texture. You can get a free wig and head covering in the Resource Center for Patients and Families, located in the Sunflower Café (cafeteria) on the 1st floor of the hospital. Open 9-5, Monday – Friday. Call **716-845-1729**.

When Should I Call the Doctor?

**Call 911 or go to the nearest hospital emergency department if you have life threatening symptoms such as an extreme allergic reaction (anaphylaxis)** such as trouble breathing; wheezing; shortness of breath; swelling in your throat, tongue, or face; heart palpitations; skin looks blue/gray; nausea and vomiting

**Contact your doctor immediately if you have:**

- any sign of infection: **Fever of 100.4°F (38°C) or higher**, chills, cough, sore throat, burning or pain upon urination, or redness, swelling, or pain at the injection site
- signs of an allergic reaction: Itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing, dizziness, or palpitations
- pain, itching, redness, swelling, blisters, or sores on the skin especially near the injection site
- unusual bruising or bleeding
- decrease in urine (urinating less than one cup daily)

**Call your doctor as soon as possible if you have:**

- nausea or vomiting that is not relieved by prescribed medication or that prevents you from eating and drinking
- headache that is not relieved by prescribed medication
- more than 4 episodes of vomiting or diarrhea in 24 hours

What Else Should I  
Know About  
Mitomycin?

- Mitomycin may cause severe decrease in the number of blood cells in your bone marrow. Call your doctor immediately if you have any signs of infection (listed above) or unusual bleeding.
- Do not get pregnant or father a child while taking mitomycin. Both men and women should use birth control. Barrier methods, such as condoms, are recommended. Talk to your doctor about when it may be safe to have a child.
- Do not breastfeed while on this medication.
- Keep all your appointments with your doctor and lab.
- Talk to your doctor before you take aspirin, any product that has aspirin in it (such as some cold medicines), or anti-inflammatory medication such as ibuprofen (Advil®) or naproxen (Aleve®)
- This drug can cause kidney damage. Your doctor will order certain lab tests to check your response to mitomycin.
- Mitomycin has been linked to two rare, but serious, conditions,
  - lung problems such as pneumonitis and pulmonary fibrosis (risk increases with age and pre-existing lung condition)
  - hemolytic uremic syndrome, a potentially life-threatening condition that involves injury to red blood cells, causing anemia and kidney problems

Your doctor will monitor you closely while you are taking mitomycin. Call your doctor immediately if you have shortness of breath or difficulty breathing; bloody stools or diarrhea; decreased urination; swelling of the face, arms, hands, feet, ankles, or lower legs; or unusual fatigue or weakness.

- If you would like more information about mitomycin, talk to your doctor or pharmacist.