

## Azacitidine (a-za-si-ti-dine)

**Names** The generic drug name is azacitidine. Vidaza® is a brand name. There may be other names for this medication.

**How is Azacitidine Administered?** Azacitidine comes as a powder. It is mixed with water and injected subcutaneously (under the skin) or intravenously (into a vein).

**Why am I Receiving Azacitidine?** Azacitidine is used to treat chronic myelomonocytic leukemia (CML) and myelodysplastic syndrome (MDS). MDS is a group of conditions in which the bone marrow produces blood cells that are misshapen and does not produce enough healthy blood cells.

**How Does it Work?** Cancer is a group of diseases in which abnormal cells divide without control. Your chemotherapy schedule, usually given in cycles, is based upon characteristics of your cancer and your chemotherapy drugs.

Azacitidine is believed to fight cancer two ways – as a DNA demethylating agent and as an antimetabolite. The process of methylation lets cancer cells grow and reproduce without any regulation. Azacitidine restores control over cell growth and reproduction, which allows your bone marrow to make healthy blood cells.

Antimetabolite drugs interrupt the cell cycle and disrupt cell growth and reproduction. If cancer cells are unable to reproduce, they die.

The faster cells are dividing, the more likely it is that chemotherapy will damage/kill them. Unfortunately, normal cells that divide quickly may be affected. These normal cells will eventually grow back and be healthy. During treatment, however, side effects may result from chemotherapy's effects on these cells.

**What Should I Tell My Doctor Before I Begin Azacitidine?** Tell your doctor if you:

- have ever had an allergic to azacitidine or mannitol (Osmitrol®, Resectisol®)
- have or have ever had liver or kidney disease
- 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 (decreased red blood cells, white blood cells, and/or platelets), which increase your risks of anemia, infections, and bleeding problems
- Nausea, vomiting, loss of appetite
- Diarrhea, constipation
- Fatigue
- Less common: mouth sores, rash, itching, headache, poor appetite, joint/muscle pain, headache, cough, anxiety/depression

### How Can I Manage These Side Effects?

- Low white blood cell count: Stay away from 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.
- Low platelet count: 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.
- Low red blood cell count: Eliminate less important tasks and delegate jobs to those who offer help. Keep a journal to identify what times of day you have the most energy and plan activities for that time period.
- To help prevent nausea, try eating smaller meals more frequently. Avoid fried, fatty, and spicy foods if you have nausea or diarrhea.
- Ask your doctor about medication to help prevent or lessen nausea.
- Drink 2-3 liters of fluid - especially water - every day unless your doctor tells you otherwise. It is particularly important to drink to prevent dehydration if you have diarrhea and to help prevent or lessen constipation.
- If you become constipated, check with your doctor or nurse before using enemas, laxatives, or suppositories.
- Mouth care is very important while taking this drug. Rinse your mouth with a mixture of ½ teaspoon of baking soda in 8 ounces of water after every meal and at bedtime. Brush your teeth and gums often with soft toothbrush. Soften it further by running it under warm water before brushing.
- Avoid smoking, alcohol, and mouthwashes that contain alcohol.
- If you develop a rash, do not put anything on it unless it is approved by your doctor.
- Use sunscreen with SPF 30 or higher when you are outdoors, even for a short time. Wear wide-brimmed hats, long-sleeved shirts, and pants. Avoid sun lamps, tanning booths, and tanning beds.

## When Should I Call the Doctor?

### **Call your doctor immediately if you experience:**

- any sign of infection: fever of 100.5°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
- any sign 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
- 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 phlegm /mucus, unusually heavy menstrual bleeding, spontaneous bleeding from your gums or nose, 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 experience:**

- diarrhea of three stools a day or diarrhea with weakness
- uncontrolled nausea that prevents you from eating or drinking or that is not controlled by prescribed medication
- vomiting more than twice in 1 day

## What Else Do I Need to Know About Azacitidine?

- This medication may stop sperm production in men and interfere with the normal menstrual cycle in women. **Do not**, however, assume that you cannot get pregnant or that you cannot get someone else pregnant while you are taking this medication. Use a reliable method of birth control to prevent pregnancy. Barrier methods, such as condoms, are recommended.
- Do not plan to have children while receiving this drug because it may harm the fetus.
- Do not breastfeed while taking azacitidine.
- If you are having surgery, including dental surgery, tell the doctor or dentist that you are using azacitidine.
- If you would like more information about azacitidine, please talk with your doctor or pharmacist.