

Cytarabine

Names The generic name is cytarabine (sy-TARE-a-been). The brand name is Cytosar-Y®, ara-C, arabinosylcytosine (There may be other names for this medication.)

How is It Given? Cytarabine is given by injection. It may be injected into a vein (intravenous/IV), usually in your arm, wrist, hand or chest. It may also be injected under the skin (subcutaneous/SQ) or into a muscle (intramuscular/IM) in your buttocks, thigh, or upper arm.

Why Am I Receiving Cytarabine? This drug is used alone or in combination with other drugs to treat certain kinds of leukemia, including AML (acute myeloid leukemia), ALL (acute lymphocytic leukemia), CML (chronic myelogenous leukemia), meningeal leukemia, and some types of lymphoma.

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 phase, active growing phases, and division. Your chemotherapy schedule is based upon the type of cancer you have, the rate at which cancer cells divide, and the times when each drug is the most likely to be effective. This is why chemotherapy is typically given in cycles.

Cytarabine is in a class of drugs known as antimetabolites. Antimetabolites attack cells at very specific phases in the cycle (cell-cycle specific). Cytarabine is biologically similar to a nutrient that cancer cells need. The cancer cells take in the drug and it disrupts their ability to reproduce. If the cells are unable to reproduce, they die.

Chemotherapy drugs identify cancer cells by their rapid rate of reproduction. Unfortunately, some normal cells reproduce quickly, and they too are attacked. The normal cells will eventually grow back and be healthy. During treatment, however, you may experience side effects such as nausea, diarrhea, mouth sores, and low blood counts.

What Should I Tell My Doctor Before I Begin?

Tell your doctor if you:

- have had an allergic reaction to cytarabine or have allergies
- have or have ever had kidney or liver disease, or gout
- 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 red blood cell, white blood cell, and platelet counts can increase your risk of infections, anemia/fatigue, and bleeding problems
- Headache
- Nausea, vomiting, and/or loss of appetite
- Mouth and/or throat soreness; metallic taste in your mouth
- Diarrhea
- Skin rash, redness, or itching
- Hand-foot syndrome (Pain, redness, and peeling of the soles of your feet and palms of your hands)
- Flu-like symptoms - fever, chills, aches and pains
- Sore or red eyes, sensitivity to light, excessive tearing
- Hair loss (less common) or thinning (more common)
- Injection site reactions: There may be redness and swelling around the injection site after your cytarabine injection. It may help to put a cold compress on the area.
- Dizziness, headache, excessive sleepiness, loss of balance, confusions (may occur when given at high doses)

How can I manage the side effects?



- ✓ **Drink 2-3 quarts of water every day unless your doctor tells you to limit your fluids.** Fluids also help prevent dehydration and constipation. Try to drink a variety of fluids to help provide the calories, sodium (salt), and other electrolytes your body needs.
- ✓ **Low white blood cell count/Preventing infection:** Stay away from people with colds or other infections. Avoid large crowds of people in small areas as they may transmit infection to you. Wash your hands often. Talk to your doctor before you have any vaccinations, such as a flu shot. Take any medications prescribed to lower the risk of infection. or treat an existing infection. Avoid foods that may increase your risk of infection: Unpasteurized juices or dairy products and raw or undercooked meat, poultry, eggs, or fish.

How can I manage the side effects? (cont.)



- ✓ **Low red blood cell count/Fatigue:** You are encouraged to eat well and stay out of bed as much as possible during your therapy to stay strong. 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.
- ✓ **Low platelet count/Preventing bleeding:** Be careful when handling sharp objects. Avoid rough sports or other situations that could cause bruising or injury. Use an electric razor. Be sure to look for any abnormal bruising, bleeding, dark colored stools, or blood in the urine. If you have a low platelet count, be aware that intercourse and other sexual activities may cause bleeding. Talk to your doctor or nurse about whether sexual activity is safe for you at this time. If intercourse is permitted, use a water-based lubricant, and avoid forceful thrusting.
- ✓ **Headache, flu-like symptoms:** Check with your doctor before taking any medications for these or any other side effects.
- ✓ **Nausea, vomiting:** To help prevent nausea, avoid fried, spicy, and/or fatty foods on the days you receive chemo and for 2-3 days afterwards. Eating small, frequent meals may help. If you feel nauseous, try foods and drinks that are 'easy on the stomach' or made you feel better when you were sick in the past - bland foods such as ginger ale, dry crackers, and toast.
- ✓ **Taste changes:** Try stronger flavors – herbs, spices, sugar, lemon or citrus (avoid citrus if you also have mouth sores). For metallic taste, use plastic cutlery not metal silverware, try cold foods or using a little sweetener, like maple syrup. Tell your doctor if you have stopped eating because of changes in taste, mouth sores, or other symptoms.
- ✓ **Mouth sores: Mouth care is very important.** Use a soft toothbrush. (Soften it further by running it under warm water.) and avoid flossing when your platelet counts are low to avoid mouth bleeding. Consider using mouthwash 3 times a day, after meals. Rinse your mouth with a mixture of ½ teaspoon of baking soda in 8 ounces of water after every meal and at bedtime. Avoid smoking, alcohol, and mouthwashes that contain alcohol. If you have mouth sores and eating is a problem, try easy-to-eat foods: bananas, watermelon, strawberries, pears, applesauce, rice, toast, peanut butter, popsicles, yogurt, or Boost® or Ensure® (protein shake).
- ✓ **Diarrhea:** Use anti-diarrheal medicines such as loperamide (Imodium®), which is available over-the-counter as 2 mg tablets. When diarrhea starts, take 2 tablets (4 mg). Take 1 tablet (2 mg) after each loose bowel movement. **Do not take more than 16 mg (8 tabs) in a day.** If you still have diarrhea after 8 tablets, please call the clinic.
- ✓ **Injection site reactions:** It may help to put a cold compress on the area.
- ✓ **Skin Care:** Avoid sun exposure. Wear sunblock with SPF 30 or higher and protective clothing, sunglasses, and hats. Avoid tanning beds. If you develop a rash, keep the area clean and dry. Do not put any creams, lotions, etc. on it unless your doctor approves it.

How can I manage the side effects? (cont.)



- ✓ **Hand-foot syndrome:** Tell your doctor right away if you have symptoms of hand-foot syndrome and discuss your treatment options. Prevention tips:
 - Frequently apply moisturizer to the palms of your hands and the soles of your feet. Wear loose fitting, well-ventilated shoes/clothes so air moves freely against your skin.
 - Limit the use of hot water or heat (sauna, sun) on your hands and feet.
 - Take cool showers or baths. Carefully pat your skin dry after washing or bathing. Use ice packs or cold, wet towel for 15 minutes at a time to cool your hands and feet. (Don't put ice directly on your skin.)
 - Reduce friction on hands and feet; stay away from running, jogging, racquet sports. Avoid using tools or household items that require you to press your hand against a hard surface like sanding, gardening tools, and screwdrivers. Don't go barefoot – use thick socks.
 - Avoid contact with harsh chemicals such as cleaners. Use rubber gloves that have a liner or wear cotton gloves underneath your rubber gloves. (Without a liner, the rubber traps the heat and sweat against your skin.)

What Else Should I Know About Cytarabine?

- Cytarabine may cause menstrual irregularities in women and interference with sperm production in men, affecting fertility. Do **NOT**, however, assume you cannot get pregnant or father a child while in treatment. Do not get pregnant while you or your sexual partner is receiving cytarabine. Use an effective method of birth control during treatment as this drug may be harmful to the fetus.
- Drinking alcoholic beverages should be kept to a minimum or avoided completely. Discuss this with your doctor.
- You should not use aspirin or any product that has aspirin in it (such as some cold medicines) unless you have talked to your doctor first.
- Do not breastfeed while taking cytarabine.
- If you would like more information about cytarabine, talk to your doctor or pharmacist.

When Should
I Call the
Doctor?

Call your doctor immediately if you have:

- any sign 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
- 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 have:

- nausea, vomiting, or mouth soreness that is not relieved by prescribed medication or that prevents you from eating or drinking
- more than 4 episodes of diarrhea in a day or diarrhea with weakness or lightheadedness
- difficulty standing or keeping your balance; changes in how you walk
- yellowing of skin or eyes