Decitabine

### Names
The generic drug name is decitabine (dee-SITE-a-been). The brand name is Dacogen®. There may be other names for this medication.

### How is it Administered?
Decitabine is given by infusion into a vein (intravenous or IV). Infusions generally last between 1-3 hours.

### Why is Decitabine Used?
This drug is used to treat myelodysplastic syndromes (MDS) – a group of conditions in which the bone marrow produces abnormally shaped blood cells instead of healthy blood cells.

### How Does it Work?
Decitabine is believed to fight cancer two ways – as a DNA demethylating agent and as an antimetabolite. The process of methylation allows cancer cells to grow and reproduce without any regulation. Decitabine 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 divide (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?
Tell your doctor if you:
- have ever had an allergic reaction to decitabine
- have liver or kidney disease
- have dental disease
- have an infection – especially viral infections like chicken pox or herpes
- 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 red blood cells, white blood cells, and/or platelets (increased risk of fatigue, infections, and bleeding problems)
- Fatigue, fever, cough
- Loss of appetite, heartburn, stomach pain, nausea, and vomiting
- Constipation and/or diarrhea
- Mouth sores
- Skin problems - itching, paleness or other color change, rash, red spots, hair loss
- Sleep problems, dizziness, confusion, and/or anxiety
- Joint or muscle aches and pains
- Swelling of hands, feet, ankles, lower legs, or stomach
- Changes in normal blood chemistry: decreased levels of albumin, magnesium, potassium, and sodium and increased levels of bilirubin, potassium, and/or glucose (sugar)

How Can I Manage These Side Effects?

- Drink 2-3 quarts a day, especially water, unless your doctor tells you to limit your fluids.
- To help avoid infections, stay away from 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.
- 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.
- Ask your doctor about medication to help prevent or lessen nausea, diarrhea, and headache.
- Decitabine may increase your skin’s sensitivity to the sun. Wear sunscreen (SPF 30 or higher), a hat, and other protective clothing. Don’t put anything on a rash without your doctor’s permission.
- Mouth care is very important. 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 (run it under warm water). Avoid alcohol, mouthwashes that contain alcohol, and tobacco products.
- If you are having trouble sleeping, talk with your doctor.
When Should I Call the Doctor?

Call **911 or go to the nearest emergency room if you have signs of a severe allergic reaction** (swelling, tingling in your face, mouth, tongue or throat; chest tightness; trouble breathing; dizziness; heart palpitations; hives.) Let your doctor know you have gone to the ER or been admitted.

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 that lasts more than 10-15 minutes or that causes dizziness; black or bloody stools; vomit that is bloody or looks like coffee grounds; blood in your urine or mucus; spontaneous bleeding from your gums or nose, or superficial bleeding into the skin that looks like pinpoint reddish-purple spots (petechiae)

Call your doctor **as soon as possible** if you have:
- diarrhea 5-6 times in 1 day or diarrhea with weakness
- nausea or flu-like symptoms not relieved by prescribed medication and/or that prevent you from eating or drinking
- unusual weakness
- white patches or sores inside your mouth or on your lips
- swelling in your hands, ankles, or feet

What Else Should I Know About Decitabine?

- Do not get pregnant or father a child while you are receiving decitabine. Both men and women should use effective birth control during treatment and for 2 months afterwards. Decitabine may harm the fetus. Talk to your doctor about birth control methods.
- You will need to have your blood tested regularly while getting this medicine to check your blood counts and your kidney and liver function.
- Be sure your doctors know you are taking decitabine before receiving any vaccinations.
- Side effects may continue after therapy has ended.
- If you would like more information about decitabine, talk to your doctor or pharmacist.