

Pemetrexed

Names The generic drug name is pemetrexed (pem-a-TREX--id). Alimta® is a brand name. There may be other names for this medication.

How is Pemetrexed Given? This medication is given by infusion into a vein (intravenous or IV). You may need vitamin B12 and folic acid (also called vitamin B9) supplements to help reduce side effects.

Why am I Receiving Pemetrexed? This drug is used to treat:

- a certain type of non-small cell lung cancer (NSCLC) that has spread to nearby tissues or to other parts of the body
- malignant pleural mesothelioma (a type of cancer that affects the inside lining of the chest cavity) in people who cannot be treated with surgery

How Does it Work? Cancer is a group of diseases in which abnormal cells reproduce without control. Your chemo schedule is based upon your cancer type, how fast the cancer cells reproduce, and the phase of the cancer cells' reproductive cycle when the chemo will be most effective. This is why chemotherapy is typically given in cycles.

Pemetrexed is in a class of drugs known as antimetabolites. It is similar to a substance normally found in the cell, so the cancer cells take it in. Inside the cell, the pemetrexed disrupts their growth and their ability to reproduce. If the cells are unable to divide, they die.

Cancer cells reproduce rapidly. The faster cells are reproducing, the more likely it is that chemotherapy will damage/kill the cells. Unfortunately, chemo affects all cells that reproduce quickly, including some types of normal cells. These are the cells most likely to be affected by chemotherapy - 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 experience side effects such as nausea and low blood counts. Low blood counts may cause fatigue, anemia, and an inability to fight off infections.

What Should I Tell My Doctor Before I Begin Pemetrexed?

Tell your doctor if you:

- have had an allergic reaction to pemetrexed, mannitol, or any other medications
- are taking aspirin, nonsteroidal anti-inflammatory medications (NSAIDs) such as ibuprofen (Advil®, Motrin®) or naproxen (Aleve®, Naprosyn®)
- have had radiation therapy
- have or have ever had kidney disease
- have excess fluid in your abdomen (ascites) or between the linings around the lung (pleural effusion)
- are pregnant or are breast-feeding

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 (increased risk for infection, anemia/fatigue, and bleeding)
- Nausea, vomiting, loss of appetite, weight loss, constipation
- Tiredness and/or weakness
- Headache, dizziness, and/or confusion
- Difficulty falling asleep or staying asleep
- Changes in mood and/or depression
- Joint and/or muscle pain
- Mouth sores
- Rash, skin irritation, and/or pale skin

How Can I Manage These Side Effects?

- To help avoid infections, stay away from people with colds, flu, or other infections. Talk to your doctor before you have any vaccinations. Wash your hands often.
- To help prevent bleeding problems, be careful when handling sharp objects. Stay away from rough sports or other situations where you may get bruised or injured. Use an electric razor. Be careful when using a toothbrush or dental floss (your doctor may recommend other ways to clean your teeth and gums).
- Drink 2-3 quarts/liters of fluids a day, especially water, unless your doctor has directed you otherwise.

- 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 a 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 your doctor approves it.
- Ask your doctor about medication to help prevent or lessen nausea, vomiting, and constipation.
- Do not take any enemas, suppositories, or laxatives for constipation unless you check with your doctor first.

When Should I Call the Doctor?

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
- signs of an allergic reaction: Itching or hives. Call 911 or go to nearest ER if you have trouble breathing or swelling/tingling in your face, mouth, or throat, chest tightness, or dizziness
- 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)
- blistering, peeling, red skin rash

Call your doctor as soon as possible if you have:

- nausea or vomiting that is not relieved by prescribed medications or that prevents you from eating or drinking
- dizziness, lightheadedness, and/or fainting
- no bowel movements for 3 days and/or feeling of bloating

What Else Should I Know About Pemetrexed?

- Avoid taking nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil®) for at least 5 days before treatment, the day of treatment, and for 2 days after treatment. (If you are not sure if a drug is a NSAID, ask your doctor or pharmacist.)
- Your doctor will prescribe a medicine called a corticosteroid to take the day before, the day of, and the day after treatment to decrease side effects.
- Vitamin B-12 and folic acid (B-9) supplements are often given with pemetrexed to decrease side effects.
- Keep all doctor and lab appointments so your doctor can monitor your blood counts.
- Pemetrexed may harm a fetus. Females should use effective birth control during treatment and for 6 months after treatment ends. Males should use effective birth control during treatment and for at least 3 months after treatment ends. Barrier methods, such as condoms, are recommended.
- Pemetrexed may cause fertility problems in males that may affect your ability to father a child. It is not known if these effects are reversible. Talk to your doctor about this risk.
- Women should not breastfeed while taking this medication and for 1 week after your final dose.
- If you would like more information about pemetrexed, talk to your doctor or pharmacist