Pralatrexate (Folotyn®)

Pronounced: PRAL-a-TREX-ate

Classification: Antimetabolite

About Pralatrexate (Folotyn®)

Pralatrexate is a specific anitmetabolite, called an antifolate, designed to accumulate in cancer cells. Antifolates mimic the structure of naturally occurring molecules involved in DNA synthesis. Cancer cells mistake antimetabolites for normal metabolites allowing the compound to stop or slow critical enzymes involved in DNA synthesis, which then triggers cell death.

How to Take Pralatrexate

Pralatrexate is given by intravenous (IV, into a ven) infusion. The dose (based on your height and weight) and how often you receive this medication will be determined by your healthcare provider.

Pralatrexate interferes with certain vitamins in the body, so patients receiving this therapy must supplement these vitamins to reduce the risk of serious side effects. You may need folic acid and B12 supplements before, during, and after treatment with pralatrexate. Talk with your care team about the doses, timing, and duration of these supplements.

Certain medications can affect the way pralatrexate works. These include Bactrim (trimethoprim/sulfamethoxazole), probenecid, and NSAIDs (non-steroidal anti-inflammatory drugs, including ibuprofen, aspirin, Naprosyn, Aleve, Motrin). Be sure to tell your oncology team about all the medications, vitamins, and supplements you take.

Possible Side Effects of Pralatrexate

There are a number of things you can do to manage the side effects of pralatrexate. Talk to your care team about these recommendations. They can help you decide what will work best for you. These are some of the most common or important side effects:

**Mouth Ulcers (Mucositis)**

Certain cancer treatments can cause sores or soreness in your mouth and/or throat. Notify your oncology care team if your mouth, tongue, inside of your cheek or throat becomes white, ulcerated, or painful. Performing regular mouth care can help prevent or manage mouth sores. If mouth sores become painful, your doctor or nurse can recommend a pain reliever.

- Brush with a soft-bristle toothbrush or cotton swab twice a day.
- Avoid mouthwashes that contain alcohol. A baking soda and/or salt with warm water mouth rinse (2 level teaspoons of baking soda or 1 level teaspoon of salt in an eight-ounce glass of warm water) is recommended 4 times daily.
- If your mouth becomes dry, eat moist foods, drink plenty of fluids (6-8 glasses), and suck on sugarless hard candy.
- Avoid smoking and chewing tobacco, drinking alcoholic beverages, and citrus juices.

**Low Platelet Count (Thrombocytopenia)**

Platelets help your blood clot, so when the count is low you are at a higher risk of bleeding. Let your oncology care team know if you have any excess bruising or bleeding, including nose bleeds, bleeding gums, or blood in your urine or stool. If the platelet count becomes too low, you may receive a transfusion of platelets.

- Do not use a razor (an electric razor is fine).
- Avoid contact sports and activities that can result in injury or bleeding.
• Do not take aspirin (salicylic acid), non-steroidal, anti-inflammatory medications (NSAIDs) such as Motrin/Advil (ibuprofen), Aleve (naproxen), Celebrex (celecoxib), etc. as these can all increase the risk of bleeding. Please consult with your healthcare team regarding the use of these agents and all over-the-counter medications/supplements while on therapy.

• Do not floss or use toothpicks and use a soft-bristle toothbrush to brush your teeth.

**Nausea and Vomiting**

Talk to your oncology care team so they can prescribe medications to help you manage nausea and vomiting. In addition, dietary changes may help. Avoid things that may worsen the symptoms, such as heavy or greasy/fatty, spicy or acidic foods (lemons, tomatoes, oranges). Try saltines, or ginger ale to lessen symptoms.

Call your oncology care team if you are unable to keep fluids down for more than 12 hours or if you feel lightheaded or dizzy at any time.

**Fatigue**

Fatigue is very common during cancer treatment and is an overwhelming feeling of exhaustion that is not usually relieved by rest. While on cancer treatment, and for a period after, you may need to adjust your schedule to manage fatigue. Plan times to rest during the day and conserve energy for more important activities. Exercise can help combat fatigue; a simple daily walk with a friend can help. Talk to your healthcare team for helpful tips on dealing with this side effect.

**Low Red Blood Cell Count (Anemia)**

Your red blood cells are responsible for carrying oxygen to the tissues in your body. When the red cell count is low, you may feel tired or weak. You should let your oncology care team know if you experience any shortness of breath, difficulty breathing, or pain in your chest. If the count gets too low, you may receive a blood transfusion.

**Constipation**

There are several things you can do to prevent or relieve constipation. Include fiber in your diet (fruits and vegetables), drink 8-10 glasses of non-alcoholic fluids a day, and keep active. A stool softener once or twice a day may prevent constipation. If you do not have a bowel movement for 2-3 days, you should contact your healthcare team for suggestions to relieve the constipation.

**Fever**

Fever can be a side effect of pralatrexate, but it can also be an indication of infection. If you experience a fever (temperature above 100.4°F or 38°C), you should notify your doctor right away.

**Peripheral Edema**

Peripheral edema is swelling of the extremities caused by the retention of fluid. It can cause swelling of the hands, arms, legs, ankles, and feet. The swelling can become uncomfortable. Notify your oncology care team if you are experiencing any new or worsening swelling.

**Nosebleed (Epistaxis)**

Patients may experience minor bleeding, such as a nosebleed. While a nosebleed may not seem like much of a concern, you should notify your healthcare team right away if you develop bleeding of any sort.

**Cough**

Pralatrexate can cause a new or worsening cough. Notify your healthcare provider of any changes in your breathing, including shortness of breath, wheezing, or cough.

**Low White Blood Cell Count (Leukopenia or Neutropenia)**

White blood cells (WBC) are important for fighting infection. While receiving treatment, your WBC count can drop, putting you at a higher risk of getting an infection. You should let your doctor or nurse know right away if you have a fever (temperature greater than 100.4°F or 38°C), sore throat or cold, shortness of breath, cough, burning with urination, or a sore that doesn't heal.
Tips to preventing infection:

- **Washing hands**, both yours and your visitors, is the best way to prevent the spread of infection.
- Avoid large crowds and people who are sick (i.e.: those who have a cold, fever, or cough or live with someone with these symptoms).
- When working in your yard, wear protective clothing including long pants and gloves.
- Do not handle pet waste.
- Keep all cuts or scratches clean.
- Shower or bath daily and perform frequent *mouth care*.
- Do not cut cuticles or ingrown nails. You may wear nail polish, but not fake nails.
- Ask your oncology care team before scheduling dental appointments or procedures.
- Ask your oncology care team before you, or someone you live with, has any vaccinations.

**Diarrhea**

Your oncology care team can recommend medications to relieve *diarrhea*. Also, try eating *low-fiber*, bland foods, such as white rice and boiled or baked chicken. Avoid raw fruits, vegetables, whole-grain bread, cereals, and seeds. Soluble fiber is found in some foods and absorbs fluid, which can help relieve diarrhea. Foods high in soluble fiber include: applesauce, bananas (ripe), canned fruit, orange sections, boiled potatoes, white rice, products made with white flour, oatmeal, cream of rice, cream of wheat, and farina. Drink 8-10 glasses of non-alcoholic, un-caffeinated fluid a day to prevent dehydration.

**Less common, but important side effects can include:**

- **Skin Reactions**: This medication can cause severe skin reactions including rash, sores, peeling, and blistering of the skin. Notify your oncology team if you develop any skin changes.
- **Liver Toxicity**: This medication can cause liver toxicity, which your oncology care team may monitor for using blood tests called liver function tests. Notify your healthcare provider if you notice yellowing of the skin or eyes, your urine appears dark or brown, or you have pain in your abdomen, as these can be signs of liver toxicity.
- **Tumor Lysis Syndrome**: If there are a large number of tumor cells in your body prior to treatment, you are at risk for tumor lysis syndrome. This happens when the tumor cells die too quickly and their waste overwhelms the body. You may be given medication (allopurinol) and IV fluids to help prevent this. If you experience nausea, vomiting, diarrhea or become lethargic (drowsy, sluggish), notify your oncology team right away. TLS can affect your kidney function. Your provider will monitor your kidney function with blood work. Notify your provider if you have little or no urine output.

**Reproductive Concerns**

Exposure of an unborn child to this medication could cause birth defects, so you should not become pregnant or father a child while on this medication. For men, effective birth control is necessary during treatment and for at least 3 months after your last treatment, even if you believe you are not producing sperm. For women, effective birth control is necessary during treatment and for at least 6 months after your last treatment, even if your menstrual cycle stops. You should not breastfeed while receiving this medication and for at least 1 week after your last dose.