

## Methotrexate

Names

The generic drug name is methotrexate (meth-oh-TREX-ate). Brand names of tablets include Rheumatrex® and Trexall™. Brand names of injectables include Otrexup™ and Rasuvo®. There may be other names for this medication.

How is it Administered?

Methotrexate is available as a tablet to be taken by mouth. It is also available as an injection into muscle, an infusion into a vein (intravenous or IV), or as an infusion into the area around the brain and spinal cord (intrathecal infusion). Your doctor will determine how your medication is given depending on condition being treated and other factors.

Why am I Taking Methotrexate?

This drug is used to treat some autoimmune conditions such as severe psoriasis, rheumatoid arthritis, Crohn's disease and multiple sclerosis. It is used to treat cancers of the breast, head and neck, lung, and stomach. Methotrexate also treats sarcoma, some types of lymphoma and leukemia, and gestational trophoblastic cancer – a rare cancer that grows in the tissues that form following conception.

How Does it Work?

Methotrexate is in a class of drugs known as antimetabolites. It interrupts the body's immune response by increasing the sensitivity of T-cells. T cells play a very important role in your immunity to foreign substances.

Methotrexate also kills cancer cells, both by interrupting the immune response and by working as an antifolate chemotherapy. Antifolates work by slowing cell division, (reproduction) and inhibiting the growth of cancer cells. The cancer cells take in the methotrexate, but once inside the cell, it stops them from reproducing.

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

- have ever had an allergic reaction to methotrexate or have allergies
- have or have ever had excess fluid in the areas around your stomach or lungs;
  stomach ulcers; ulcerative colitis; or lung, liver, or kidney disease
- have any type of infection or any condition that affects your immune system
- take nonsteroidal anti-inflammatory drugs such as ibuprofen (Advil®)
- have a history of alcohol abuse
- are receiving radiation therapy
- are pregnant or breastfeeding

This drug can interact with other medications. Tell your doctor and pharmacist about all prescription or over-the-counter medications, vitamins, herbal, or diet supplements that you take.

Please let us know ahead of time if you have had any allergic reactions or side effects to any medicines you have received in the past.

What Are Some Possible Side Effects?

- Low blood cell counts (increased risk of infection, fatigue, and/or bleeding)
- Mouth sores, swollen gums
- Loss of appetite
- Extreme sensitivity to sunlight (photosensitivity)
- Hair loss or thinning (usually temporary)
- Diarrhea
- Dizziness and/or drowsiness
- Decreased fertility (both men and women)
- At higher doses: nausea, vomiting, skin rash, reddening of the skin

How Can I Manage These Side Effects?

- 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.
- Ask your doctor about medication to help prevent or lessen nausea, diarrhea, and headache.
- Mouth care is very important. To minimize mouth problems, 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).
- Avoid smoking, alcohol, and mouthwashes that contain alcohol.
- Drink at least 2-3 quarts of fluid, especially water, every 24 hours, unless your doctor tells you to limit your fluids.
- Use sunscreen with SPF 30 or higher when you are outdoors, even for a short time. Wear sunglasses, wide-brimmed hats, long-sleeved shirts, and pants. Keep your neck, chest, and back covered. Do not use tanning beds. If you develop a rash, do not put anything on it unless your doctor approves it. Keep the skin around the rash clean and dry.

When Should I

Call 911 or go to the nearest hospital emergency room if you feel you are in a life-

PE149 © 2023 Roswell Park Patient Education 12/2023

#### Call the Doctor?

threatening situation such as signs of a severe allergic reaction (anaphylaxis):

Difficulty breathing; wheezing; shortness of breath; swelling of face, throat, or tongue; feeling that your throat is closing; heart palpitations; nausea and vomiting; or your skin looks gray or blue.

Please let us know if you go to the emergency room or are admitted to the hospital.

### 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.
- unusual bruising or bleeding: Bleeding lasts more than 10-15 minutes; black or bloody stools; vomit that is bloody or that looks like coffee grounds; blood in your urine or mucus, spontaneous bleeding from your gums or nose
- no urine production for 12 hours
- seizures

### Let your doctor know if you have:

- nausea or vomiting not relieved by prescribed medication or that prevents you from eating or drinking
- diarrhea with weakness
- yellowing of skin or eyes
- swelling in your feet or ankles and/or joint pain
- dark-colored urine, a decrease in urination, or pale stools
- blurred or double vision, confusion, or headache
- severe (blistering, peeling) red skin rash

# What Else Should I • Know About Methotrexate?

- Methotrexate may interfere with the normal menstrual cycle (period) in women and stop sperm production in men. Do NOT assume that you cannot get pregnant or father a child. Both men and women should use effective birth control during treatment and for 3 months after treatment ends. A barrier method such as condoms is recommended. This drug may be harmful to a fetus.
- Many drugs interact with methotrexate. Make sure your doctor knows about
  ALL other medicines and supplements that you are taking. Do not drink alcohol.
- High doses of methotrexate may cause harm to your kidneys, lungs, or intestines.
  Your team will monitor you during treatment.
- Keep all appointments with your doctors and the lab.
- If you are having surgery or dental surgery, tell the doctor or dentist that you are taking methotrexate.

PE149 © 2023 Roswell Park Patient Education 12/2023