MSK Kids

PATIENT & CAREGIVER EDUCATION

Methotrexate

This information from Lexicomp® explains what you need to know about this medication, including what it's used for, how to take it, its side effects, and when to call your healthcare provider.

Brand Names: US

Jylamvo; Otrexup; Rasuvo; RediTrex [DSC]; Trexall; Xatmep

Brand Names: Canada

ACH-Methotrexate; AURO-Methotrexate; JAMP-Methotrexate [DSC]; Metoject; PMS-Methotrexate

Warning

For all uses of this drug:

- Severe side effects like bone marrow problems, liver problems, lung problems, and infections can happen with this drug. Some side effects may not go away and can be deadly. You must talk with the doctor about the risks of this drug.
- This drug may cause kidney problems in some patients. Talk with the doctor.
- Regular blood work and other exams will need to be done to check for side effects. Follow what the doctor has told you.
- Tell the doctor if your child has kidney problems or extra fluid around the stomach area or lungs. The chance of side effects may be raised.
- Talk with the doctor if your child is getting radiation. There may be

more chance of harm to tissue and bone.

- New types of cancer have happened in people taking this drug. If you have questions, talk with the doctor.
- It is common to have diarrhea, upset stomach, throwing up, or mouth sores with this drug. However, sometimes these may be signs of severe and sometimes deadly stomach or bowel problems. Tell the doctor if your child gets any new or worsening signs. This drug may need to be stopped.
- Severe skin reactions have happened with this drug. These have included Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), and other severe skin reactions. Sometimes these have been deadly. Get medical help right away if you have signs like red, swollen, blistered, or peeling skin; other skin irritation (with or without fever); red or irritated eyes; or sores in your mouth, throat, nose, or eyes.
- Very bad and sometimes deadly bone marrow problems and stomach or bowel problems have happened when this drug was taken with nonsteroidal anti-inflammatory drug (NSAIDs) like ibuprofen or naproxen.
- Not all methotrexate products are used to treat cancer. Talk with the doctor.
- If your child is of childbearing age, talk with your child's doctor before your child takes this drug.
- If your child is of childbearing age, a pregnancy test will need to be done before starting this drug to make sure your child is not pregnant.

If your child is pregnant:

- This drug may cause harm to the unborn baby or loss of the unborn baby if you take it while you are pregnant.
- If your child or your child's partner may become pregnant, birth

control must be used while taking this drug and for some time after the last dose. Ask the doctor how long birth control must be used. If your child or your child's partner gets pregnant, call the doctor right away.

Cancer treatment:

- Patients with cancer may be at greater risk of getting a bad and sometimes deadly health problem called tumor lysis syndrome (TLS). Talk with the doctor.

For all reasons other than cancer treatment:

- Do not give this drug to your child during pregnancy.
- This drug must only be used when other drugs cannot be used or have not worked. Talk with your child's doctor to be sure that the benefits of this drug are more than the risks.

Injection:

- Some products have benzyl alcohol. If possible, avoid products with benzyl alcohol in newborns or infants. Serious side effects can happen in these children with some doses of benzyl alcohol, including if given with other drugs that have benzyl alcohol. Talk with the doctor to see if this product has benzyl alcohol in it.

What is this drug used for?

- It is used to treat cancer.
- It is used to treat some types of arthritis.
- It is used to treat some types of psoriasis.
- It may be given to your child for other reasons. Talk with the doctor.

Oral solution (Jylamvo):

- This drug is not approved for this use in children. However, the doctor may decide the benefits of taking this drug outweigh the risks. If your child has been given this drug, ask the doctor for information about the benefits and risks. Talk with your child's doctor if you have questions about giving this drug to your child.

What do I need to tell the doctor BEFORE my child takes this drug?

All products:

- If your child is allergic to this drug; any part of this drug; or any other drugs, foods, or substances. Tell the doctor about the allergy and what signs your child had.
- If your child has any of these health problems: Bone marrow disease (like low white blood cell count, low platelet count, or anemia), drinking problem, liver disease, or a weak immune system.

If your child is breast-feeding a baby:

- Be sure your child does not breast-feed a baby while taking this drug. Your child may also need to avoid breast-feeding a baby for some time after the last dose. Talk with your child's doctor to see if your child needs to avoid breast-feeding a baby after the last dose.

Tablets:

- If your child is not able to swallow tablets.

This is not a list of all drugs or health problems that interact with this drug.

Tell the doctor and pharmacist about all of your child's drugs (prescription or OTC, natural products, vitamins) and health problems. You must check to make sure that it is safe to give this drug with all of your child's other drugs and health problems. Do not start, stop, or change the dose of any drug your child takes without checking with the doctor.

What are some things I need to know or do while my child takes this drug?

All products:

- Tell all of your child’s health care providers that your child is taking this drug. This includes your child’s doctors, nurses, pharmacists, and dentists.
- Have your child avoid tasks or actions that call for alertness until you see how this drug affects your child. These are things like riding a bike, playing sports, or using items such as scissors, lawnmowers, electric scooters, toy cars, or motorized vehicles.
- Talk with the doctor before your child gets any vaccines. Use of some vaccines with this drug may either raise the chance of very bad infection or make the vaccine not work as well.
- Your child may have more chance of getting infections. Have your child wash hands often. Avoid crowds and people with infections, colds, or flu.
- Your child may bleed more easily. Make sure your child is careful and avoids injury. Be sure your child has a soft toothbrush.
- Alcohol may interact with this drug. Be sure your child does not drink alcohol.
- Your child may get sunburned more easily. Avoid lots of sun, sunlamps, and tanning beds. Use sunscreen and dress your child in clothing and eyewear that protects from the sun. Keep protecting your child from sunburn for as long as you were told by the doctor.
- Tell the doctor if your child sweats more than usual or has fluid loss, diarrhea, increased thirst, throwing up; or decreased appetite.
- Nervous system problems that may be severe have happened with this drug. Some lasted for a short time while some lasted for a long time. These nervous system problems can get worse over time, may not get better, and can be deadly. If you have questions, talk with the doctor.
- If your child has had radiation or is getting radiation now, talk with your child’s doctor.

- This drug may affect fertility. This may lead to not being able to get pregnant or father a child. If this happens, it is not known if fertility will go back to normal.

If your child is or may be sexually active:

- If your child misses a period, has unprotected sex, or thinks that their birth control has not worked, call the doctor right away.

Cancer treatment:

- If your child is taking a product that has folic acid or folinic acid in it, talk with the doctor. It may make this drug not work as well.

What are some side effects that I need to call my child's doctor about right away?

WARNING/CAUTION: Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your child's doctor or get medical help right away if your child has any of the following signs or symptoms that may be related to a very bad side effect:

For all uses of this drug:

- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.
- Signs of infection like fever, chills, very bad sore throat, ear or sinus pain, cough, more sputum or change in color of sputum, pain with passing urine, mouth sores, or wound that will not heal.
- Signs of bleeding like throwing up or coughing up blood; vomit that looks like coffee grounds; blood in the urine; black, red, or tarry stools; bleeding from the gums; abnormal vaginal bleeding; bruises without a cause or that get bigger; or bleeding you cannot stop.
- Signs of a pancreas problem (pancreatitis) like very bad stomach pain, very bad back pain, or very bad upset stomach or throwing up.

- Signs of kidney problems like unable to pass urine, change in how much urine is passed, blood in the urine, or a big weight gain.
- Signs of liver problems like dark urine, tiredness, decreased appetite, upset stomach or stomach pain, light-colored stools, throwing up, or yellow skin or eyes.
- Signs of lung or breathing problems like shortness of breath or other trouble breathing, cough, or fever.
- Signs of nerve problems like a burning, numbness, or tingling feeling that is not normal; weakness; or not being able to move a part of the body (paralysis).
- Pinpoint red spots on the skin.
- Very bad dizziness or passing out.
- Seizures.
- Feeling confused.
- Feeling sleepy.
- Change in eyesight.
- Bone pain.
- Swelling, warmth, numbness, change of color, or pain in a leg or arm.
- Weakness on 1 side of the body, trouble speaking or thinking, change in balance, drooping on one side of the face, or blurred eyesight.
- Headache.
- Neck stiffness.
- A severe skin reaction (Stevens-Johnson syndrome/toxic epidermal necrolysis) may happen. It can cause severe health problems that may not go away, and sometimes death. Get medical help right away if your child has signs like red, swollen, blistered, or peeling skin (with or without fever); red or irritated eyes; or sores in the mouth, throat, nose, or eyes.

Cancer treatment:

- Signs of a severe health problem called tumor lysis syndrome (TLS) like fast or abnormal heartbeat; passing out; trouble passing urine; muscle weakness or cramps; upset stomach, throwing up, diarrhea, or not able to eat; or feeling sluggish.

What are some other side effects of this drug?

All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your child's doctor or get medical help if any of these side effects or any other side effects bother your child or do not go away:

- Decreased appetite.
- Hair loss.
- Feeling dizzy, tired, or weak.
- Stomach pain.
- Signs of a common cold.

These are not all of the side effects that may occur. If you have questions about side effects, call your child's doctor. Call your child's doctor for medical advice about side effects.

You may report side effects to your national health agency.

How is this drug best given?

Give this drug as ordered by your child's doctor. Read all information given to you. Follow all instructions closely.

All products:

- Your child's dose and how often your child will take it will be based on the health problem that is being treated. This drug must **NEVER** be taken daily unless used for some types of cancer. Deadly errors have

happened when this drug was taken the wrong way. Be sure you know how to give this drug to your child. If you do not understand what your child's dose is and how often to give it, talk with the doctor.

- How this drug is taken may change based on blood work results, side effects, and how well the drug is working.
- You will need to take special care when handling this drug. Check with the doctor or pharmacist to see how to handle this drug.
- Have your child drink lots of noncaffeine liquids every day unless told to drink less liquid by your child's doctor.

Oral solution (Xatmep):

- Measure liquid doses carefully. Use the measuring device that comes with this drug. If there is none, ask the pharmacist for a device to measure this drug.
- Do not use a household teaspoon or tablespoon to measure this drug. Doing so could lead to the dose being too high.

Injection (subcutaneous):

- It is given as a shot into the fatty part of the skin on the top of the thigh or the belly area.
- If you will be giving your child the shot, your child's doctor or nurse will teach you how to give the shot.
- Do not give into skin within 2 inches (5 cm) of the belly button.
- Do not use if the solution is cloudy, leaking, or has particles.
- Do not give into skin that is irritated, tender, bruised, red, scaly, hard, scarred, or has stretch marks.
- If you are not sure if your child's dose was injected or if you have a hard time giving the dose, talk with your child's doctor or pharmacist before using another dose.
- Throw away needles in a needle/sharp disposal box. Do not reuse needles or other items. When the box is full, follow all local rules for getting rid

of it. Talk with a doctor or pharmacist if you have any questions.

All other injection products:

- It is given as a shot into a muscle or vein.
- This drug may be given as a shot into the spinal fluid.

What do I do if my child misses a dose?

- Call your child’s doctor to find out what to do.

How do I store and/or throw out this drug?

Oral solution (Xatmep):

- Store liquid (solution) in a refrigerator or at room temperature. If stored at room temperature, throw away any part not used after 2 months.
- Keep lid tightly closed.
- Do not freeze.
- Protect from heat.

Tablets and injection (subcutaneous):

- Store at room temperature protected from light. Store in a dry place. Do not store in a bathroom.
- Do not freeze.

All other injection products:

- If you need to store this drug at home, talk with your child’s doctor, nurse, or pharmacist about how to store it.

All products:

- Keep all drugs in a safe place. Keep all drugs out of the reach of children and pets.
- Throw away unused or expired drugs. Do not flush down a toilet or pour

down a drain unless you are told to do so. Check with your pharmacist if you have questions about the best way to throw out drugs. There may be drug take-back programs in your area.

General drug facts

- If your child’s symptoms or health problems do not get better or if they become worse, call your child’s doctor.
- Do not share your child’s drug with others and do not give anyone else’s drug to your child.
- Some drugs may have another patient information leaflet. If you have any questions about this drug, please talk with your child’s doctor, nurse, pharmacist, or other health care provider.
- If you think there has been an overdose, call your poison control center or get medical care right away. Be ready to tell or show what was taken, how much, and when it happened.

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This generalized information is a limited summary of diagnosis, treatment, and/or medication information. It is not meant to be comprehensive and should be used as a tool to help the user understand and/or assess potential diagnostic and treatment options. It does NOT include all information about conditions, treatments, medications, side effects, or risks that may apply to a specific patient. It is not intended to be medical advice or a substitute for the medical advice, diagnosis, or treatment of a health care provider based on the health care provider’s examination and assessment of a patient’s specific and unique circumstances. Patients must speak with a health care provider for complete information about their health, medical questions, and treatment options, including any risks or benefits regarding use of medications. This information does not endorse any treatments or medications as safe, effective, or approved for treating a specific patient. UpToDate, Inc. and its affiliates disclaim any warranty or liability relating to this information or the use thereof. The use of this information is governed by the Terms of Use, available at

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Last Reviewed Date

2023-12-20

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If you have any questions, contact a member of your care team directly. If you're a patient at MSK and you need to reach a provider after 5 p.m., during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

Methotrexate - Last updated on December 12, 2022
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