

Tretinoin (Systemic)

This information from UpToDate® Lexidrug™ 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: Canada

JAMP-Tretinoin; Vesanoid

Warning

- The risk of severe and sometimes deadly birth defects is very high if your child takes this drug at any time during pregnancy. Any unborn baby can be harmed. There is no good way to tell if an unborn baby has been harmed. The risk of losing an unborn baby is also raised and premature births have happened. The doctor will talk about the risks before your child starts this drug. If your child will be taking this drug during pregnancy, make sure you know all the risks to the unborn baby.
- Your child must use 2 kinds of birth control to prevent pregnancy for 1 month before starting this drug, while taking it, and for 1 month after the last dose. A pregnancy test will be done to show that your child is NOT pregnant before starting this drug and every month while taking it. If your child gets pregnant while taking this drug or within 1 month after the last dose, call the doctor right away.
- If your child's sex partner may get pregnant, they may need to use birth control while your child takes this drug and for 1 week after the last dose. Talk with the doctor to see if your child needs to use birth control while taking this drug.
- This drug may cause a high white blood cell count. Sometimes, this can

raise the chance of very bad and sometimes deadly health problems. Your child will be closely watched by the doctor.

- This drug may cause a severe and sometimes deadly health problem called differentiation syndrome (retinoic-acid-APL syndrome). Most of the time, this problem happens during the first month of taking this drug and sometimes after the first dose. Call the doctor right away if your child has a fever, shortness of breath or trouble breathing; swelling; weight gain; severe dizziness or passing out; 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; or signs of kidney problems like not able to pass urine, change in how much urine is passed, or blood in the urine.

What is this drug used for?

- It is used to treat a type of leukemia.

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

- 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 is taking any of these drugs: Aminocaproic acid or tranexamic acid.
- If your child is taking any of these drugs: Demeclocycline, doxycycline, minocycline, tetracycline, a product that has vitamin A in it, a product that is like vitamin A, or St. John's wort.

If your child is breast-feeding a baby:

- Be sure your child does not breast-feed a baby while taking this drug and for 1 week after the last dose.

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?

- 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.
- Treatment with this drug may lead to higher cholesterol and triglycerides. The effect of these changes on heart health is not known. Talk with the doctor.
- Have your child's blood work and other lab tests checked as you have been told by the doctor.
- Blood clots have happened with this drug. Tell the doctor if your child has ever had a blood clot.
- If the patient is a child, use this drug with care. The risk of some side effects may be higher in children.

If your child is or may be sexually active:

- Be sure your child does not use progestin-only birth control pills (minipills). They may not work well. Talk with the doctor.
- If your child misses a period, has unprotected sex, or thinks that their birth control has not worked, call the doctor right away.

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:

- 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 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 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 lung or breathing problems like shortness of breath or other trouble breathing, cough, or fever.
- Signs of high or low blood pressure like very bad headache or dizziness, passing out, or change in eyesight.
- Weakness on 1 side of the body, trouble speaking or thinking, change in balance, drooping on one side of the face, or blurred eyesight.
- Change in eyesight.
- Change in hearing.
- Hearing loss.
- Swelling of belly.
- A heartbeat that does not feel normal.
- A burning, numbness, or tingling feeling that is not normal.
- Depression or other mood changes.

- Shortness of breath, a big weight gain, or swelling in the arms or legs.
- Feeling confused.
- Hallucinations (seeing or hearing things that are not there).
- Pale skin.
- Call the doctor right away if your child has signs of a blood clot like chest pain or pressure; coughing up blood; shortness of breath; swelling, warmth, numbness, change of color, or pain in a leg or arm; or trouble speaking or swallowing.
- Raised pressure in the brain has happened with this drug. This can cause long lasting loss of eyesight and sometimes death. Call the doctor right away if your child has a bad headache, dizziness, upset stomach or throwing up, or seizures. Call the doctor right away if your child has a change in strength on 1 side that is greater than the other, trouble speaking or thinking, change in balance, or blurred eyesight or other change in eyesight.

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:

- Hair loss.
- Flushing.
- Headache.
- Stomach pain.
- Bone, muscle, or side pain.
- Skin irritation.
- Feeling dizzy, tired, or weak.
- Dry mouth, eyes, skin, or lips.
- Sweating a lot.

- Mouth irritation or mouth sores.
- Anxiety.
- Trouble sleeping.
- Earache.
- Weight gain or loss.
- Decreased appetite.
- Shivering.
- Signs of a common cold.
- Constipation, diarrhea, throwing up, and upset stomach are common with this drug. If these happen, talk with your doctor about ways to lower these side effects. Call your doctor right away if any of these effects bother you, do not go away, or are severe.

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.

- Give with a meal.
- Have your child swallow whole. Do not let your child chew, break, open, or dissolve.
- If your child is not able to swallow the capsule whole, talk with the doctor.
- If your child throws up after taking this drug, do not repeat the dose.
- Keep giving this drug to your child as you have been told by your child's doctor or other health care provider, even if your child feels well.

What do I do if my child misses a dose?

- Give a missed dose as soon as you think about it.
- If it is less than 10 hours until your child's next dose, skip the missed dose and go back to your child's normal time.
- Do not give 2 doses at the same time or extra doses.

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

- Store at room temperature protected from light. Store in a dry place. Do not store in a bathroom.
- 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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If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

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

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