

Tretinoin (All-trans retinoic acid)

About This Medicine

Tretinoin is used to treat cancer. It is given orally (by mouth).

Possible Side Effects

- An increase in your white blood cells
- Dry mouth, nose
- Nausea and vomiting (throwing up)
- Pain in your abdomen
- Abnormal bleeding – symptoms may be coughing up blood, throwing up blood (may look like coffee grounds), red or black tarry bowel movements, abnormally heavy menstrual flow, nosebleeds, or any other unusual bleeding.
- Fever
- Chills
- General discomfort, a feeling of being unwell
- Swelling in your legs, ankles, and/or feet
- Infection
- Upper respiratory tract problems
- Trouble breathing
- Headache
- General pain and/or pain in your bones
- Pain in your chest
- Dry skin
- Rash

Note: Each of the side effects above was reported in 30% or greater of patients treated with tretinoin. All possible side effects are not included. Your side effects may be different depending on your cancer diagnosis, condition, or if you are receiving other medicines in combination. Please discuss any concerns or questions with your medical team.

Warnings and Precautions

- Increase in your cholesterol and your triglyceride levels
- A rapid increase in your white blood cells, which may be life-threatening



- Changes in your liver function
- Blood clots and events such as stroke and heart attack. A blood clot in your leg may cause your leg to swell, appear red and warm, and/or cause pain. A blood clot in your lungs may cause trouble breathing, pain when breathing, and/or chest pain.
- Increase pressure inside of your skull. You may have a headache, double or blurry vision, temporary blindness that may last a few seconds affecting one or both eyes, nausea and vomiting (throwing up), ringing in the ears.
- A serious syndrome may happen with the use of this medicine that is known as differentiation syndrome, which can be life-threatening. It can cause fever, weight gain, swelling, and breathing problems. **Immediately report any of these symptoms to your healthcare provider.**

Note: Some of the side effects above are very rare. If you have concerns and/or questions, please discuss them with your medical team.

Important Information

- This medicine may impair your ability to drive or use machinery. Use caution and talk to your doctor and/or nurse about any precautions you may need to take.

How to Take Your Medicine

- Take the medicine whole, with water and a meal. Do not chew, dissolve, or open capsules.
- **Missed dose:** If you miss a dose, and it is less than 10 hours until your next dose, then skip the missed dose and go back to your normal schedule. If you miss a dose, and it is more than 10 hours until your next dose, take the missed dose. Do not take 2 doses at the same time or extra doses. Do not replace a vomited dose.
- **Handling:** Wash your hands with soap and water, before and after handling your medicine, your caretakers should not handle your medicine with bare hands and should wear latex gloves.
- Cytotoxic medicines leave the body through urine and stool, but they can also be present in other body fluids such as blood, vomit, semen, and vaginal fluids. Take precautions to prevent others from coming in contact with your medicine or your body fluids. Follow safety precautions during your treatment and for as long as directed by your health care provider after your treatment. If you take a cytotoxic pill each day, follow these precautions every day.
- **Storage:** Store this medicine in the original container at room temperature. Protect from light.
- **Disposal of unused medicine:** Do not flush any expired and/or unused medicine down the toilet or drain unless you are specifically instructed to do so on the medicine label. Some facilities have take-back programs and/or other options. If you do not have a take-back program in your area, then please discuss with your nurse or your doctor how to dispose of unused medicine.

Treating Side Effects

- To help with dry skin, moisturize your skin several times a day.
- Avoid sun exposure and apply sunscreen routinely when outdoors.
- If you get a rash do not put anything on it unless your doctor or nurse says you may. Keep the area around the rash clean and dry. Ask your doctor for medicine if your rash bothers you.



- Keeping your pain under control is important to your well-being. Please tell your doctor or nurse if you are experiencing pain.
- Drink enough fluids to keep your urine pale yellow.
- Sugar-free hard candies and chewing gum can keep your mouth moist.
- If you throw up, you should drink more fluids so that you do not become dehydrated (lack of water in the body from losing too much fluid).
- To help with nausea and vomiting, eat small, frequent meals instead of three large meals a day. Choose foods and drinks that are at room temperature. Ask your nurse or doctor about other helpful tips and medicine that is available to help stop or lessen these symptoms.

Food and Medicine Interactions

- This medicine may interact with grapefruit and grapefruit juice. Talk to your doctor as this could make side effects worse.
- Check with your doctor or pharmacist about all other prescription medicines and over-the-counter medicines and dietary supplements (vitamins, minerals, herbs, and others) you are taking before starting this medicine as there are known medicine interactions with tretinoin. Also, check with your doctor or pharmacist before starting any new prescription or over-the-counter medicines, or dietary supplements to make sure that there are no interactions.
- This medicine may interact with St. John's Wort and may lower the levels of the medicine in your body, which can make it less effective.
- Avoid the use of vitamin A supplements while taking tretinoin.

When to Call the Doctor

Call your doctor or nurse if you have any of these symptoms and/or any new or unusual symptoms:

- Fever of 100.4° F (38° C) or higher
- Chills
- Headache that does not go away
- Ringing in the ear
- Blurry vision or changes in your eyesight
- Signs of abnormal bleeding such as coughing up blood, throwing up blood (may look like coffee grounds), easy bleeding or bruising, red or black tarry bowel movements, abnormally heavy menstrual flow, nosebleeds, or any other unusual bleeding
- Cough, wheezing and/or trouble breathing
- Chest pain or symptoms of a heart attack. Most heart attacks involve pain in the center of the chest that lasts more than a few minutes. The pain may go away and come back, or it can be constant. It can feel like pressure, squeezing, fullness, or pain. Sometimes pain is felt in one or both arms, the back, neck, jaw, or stomach. **If any of these symptoms last 2 minutes, call 911.**
- Symptoms of a stroke such as sudden numbness or weakness of your face, arm, or leg, mostly on one side of your body; sudden confusion, trouble speaking or understanding; sudden trouble seeing in one or both eyes; sudden trouble walking, feeling dizzy, loss of balance or coordination; or



sudden, bad headache with no known cause. **If you have any of these symptoms for 2 minutes, call 911.**

- Pain that does not go away or is not relieved by prescribed medicines
- Difficulty eating/swallowing
- Sore mouth/throat
- Nausea that stops you from eating or drinking and/or is not relieved by prescribed medicines
- Throwing up more than 3 times a day
- Pain in your abdomen and/or flank area that does not go away
- Decreased urine or difficulty urinating
- Signs of differentiation syndrome such as fever, weight gain, swelling, and/or trouble breathing. **Immediately report any of these symptoms to your healthcare provider.**
- New rash and/or dry skin that is bothersome
- Rash that is not relieved by prescribed medicines
- Your leg is swollen, red, warm and/or painful
- Weight gain of 5 pounds in one week (fluid retention)
- Swelling in your legs, ankles, and/or feet
- Signs of infection: fever or chills, cough, trouble breathing, severe pain in your abdomen, difficulty urinating, burning or pain when you pass urine, redness and/or swelling of the skin
- Signs of possible liver problems: dark urine, pale bowel movements, pain in your abdomen, feeling very tired and weak, unusual itching, or yellowing of the eyes or skin
- If you think you may be pregnant or may have impregnated your partner

Reproduction Warnings

- **Pregnancy warning:** This medicine can have harmful effects on the unborn baby. Women of childbearing potential, as well as women with history of infertility (unless due to hysterectomy), should use 2 effective methods of birth control during your cancer treatment and for 1 month after stopping treatment. Men with female partners of childbearing potential should use effective methods of birth control during your cancer treatment and for 1 week after stopping treatment. Let your doctor know right away if you think you may be pregnant or may have impregnated your partner.
- **Breastfeeding warning:** Women should not breastfeed during treatment and for 1 week after stopping treatment because this medicine could enter the breast milk and cause harm to a breastfeeding baby.
- **Fertility Warning:** In men, this medicine may affect your ability to have children in the future. Talk with your doctor or nurse if you plan to have children. Ask for information on sperm banking.

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