

## All-Trans Retinoic Acid (Tretinoin, Vesanoid)

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### About This Drug

All-trans retinoic acid is used to treat cancer. It is given orally (by mouth).

### Possible Side Effects

- Abnormal heartbeat
- Blurred vision or other changes in eyesight
- Ear pain or a feeling of fullness in the ears
- Soreness of the mouth and throat. You may have red areas, white patches, or sores that hurt.
- Nausea and vomiting (throwing up)
- Diarrhea (loose bowel movements)
- 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
- Weight gain
- Swelling of the hands, feet, or any other part of the body
- Tiredness and/or weakness
- Increased sweating
- Infection
- Headache
- Feeling dizzy
- General pain
- Pain in your chest and/or bones
- Trouble breathing because of fluid build-up in your lungs
- Dry skin, rash, itching
- Hot flashes or sudden skin flushing may happen. You may also feel warm or red.
- A condition that causes abnormal blood clotting. You may have abnormal bleeding and blood clots. 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. 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.

**Note:** Each of the side effects above was reported in 20% or greater of patients treated with all-trans retinoic acid. Not all possible side effects are included above.

## Warnings and Precautions

- Increase in your cholesterol and your triglyceride levels
- 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 drug 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.**
- A rapid increase in your white blood cells, which can be life-threatening.

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

## How to Take Your Medication

- Take the medicine as prescribed by your doctor.
- **Missed dose:** If you vomit or miss a dose, contact your doctor for further instructions. Do not take 2 doses at the same time and do not double up on the next dose.
- **Handling:** Wash your hands after handling your medicine, your caretakers should not handle your medicine with bare hands and should wear latex gloves.
- This drug may be present in the saliva, tears, sweat, urine, stool, vomit, semen, and vaginal secretions. Talk to your doctor and/or your nurse about the necessary precautions to take during this time.
- **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 medication 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

- Manage tiredness by pacing your activities for the day.
- Be sure to include periods of rest between energy-draining activities.
- If you are dizzy, get up slowly after sitting or lying.
- To help with dry skin and itching, 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 plenty of fluids (a minimum of eight glasses per day is recommended).
- If you throw up or have diarrhea, you should drink more fluids so that you do not become dehydrated (lack of water in the body from losing too much fluid).
- If you have diarrhea, eat low-fiber foods that are high in protein and calories and avoid foods that can irritate your digestive tracts or lead to cramping.
- Ask your nurse or doctor about medicine that can lessen or stop your diarrhea.
- 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.
- Mouth care is very important. Your mouth care should consist of routine, gentle cleaning of your teeth or dentures and rinsing your mouth with a mixture of 1/2 teaspoon of salt in 8 ounces of water or 1/2 teaspoon of baking soda in 8 ounces of water. This should be done at least after each meal and at bedtime.
- If you have mouth sores, avoid mouthwash that has alcohol. Also avoid alcohol and smoking because they can bother your mouth and throat.

## Food and Drug Interactions

- There are no known interactions of all-trans retinoic acid with food.
- 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 drug interactions with all-trans retinoic acid. 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.

## 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
- Ear pain, a feeling of fullness, and/or ringing in the ears that does not go away
- Blurry vision or changes in your eyesight such as loss of color vision and/or acuity
- Feeling dizzy or lightheaded
- 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
- Feeling that your heart is beating in a fast or not normal way (palpitations)
- 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.**
- Tiredness and/or extreme weakness that interferes with your daily activities
- Pain that does not go away or is not relieved by prescribed medicines
- Diarrhea, 4 times in one day or diarrhea with lack of strength or a feeling of being dizzy
- 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 that does not go away
- Pain in your mouth or throat that makes it hard to eat or drink
- Signs of differentiation syndrome such as fever, weight gain, swelling, and/or or trouble breathing.
- New rash, dry skin and/or itching 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 of the hands, feet, or any other part of the body
- 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

## Reproduction Warnings

- **Pregnancy warning:** This drug can have harmful effects on the unborn baby. Women of childbearing potential, as well as post-menopausal women and/or women with history of infertility, should use 2 effective methods of birth control during your cancer treatment and for 1 month after stopping treatment. Let your doctor know right away if you think you may be pregnant.



- **Breastfeeding warning:** It is not known if this drug passes into breast milk. Women should not breastfeed during treatment because this drug could enter the breast milk and cause harm to a breastfeeding baby.
- **Fertility Warning:** Fertility studies have not been done with this drug. Talk with your doctor or nurse if you plan to have children. Ask for information on sperm or egg banking.

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