Fluorouracil/5-FU

Names
The generic drug name is fluorouracil (flure oh your’ a sill). The brand name is Adrucil®. There may be other names for this medication such as 5-fluorouracil and 5-FU.

Why am I Taking Fluorouracil?
This drug is used to treat many types of cancer including cancers of the colon, rectum, anus, esophagus, pancreas, stomach, liver, breast, cervix, head and neck, thymus, and bladder.

How is 5-FU Given?
Your medication will be given by injection into a vein (intravenous or IV), usually in your arm, wrist, hand or chest.

How Does it Work?
Cancers are diseases in which abnormal cells reproduce uncontrollably. Your chemo schedule is based upon:

- your cancer type and how fast the cancer cells reproduce
- the phase of the cell cycle when the chemo is most effective – the resting, growing, or reproduction phases

Fluorouracil is an antineoplastic or cytotoxic chemotherapy. It stops the growth of cells that reproduce very quickly. Many of these cells are cancerous. Unfortunately, normal cells that reproduce quickly are also harmed, such as cells in the blood, gastrointestinal tract, hair, and skin. These normal cells will eventually grow back and be healthy.

5-FU is in a class of drugs known as antimetabolites, drugs that interrupt the cell cycle. It is similar to a nutrient that cancer cells need to grow. So, the cancer cells take in the 5-FU as if it were food, 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 fluorouracil
- have an infection
- have had radiation therapy
- have or have ever had kidney or liver disease
- are pregnant or breastfeeding
This drug may interact with other medications or cause harmful side effects. Tell your doctor and pharmacist about all prescription or over-the-counter medications, vitamins, herbal or diet supplements you take.

What Are Some Possible Side Effects?

- Bone marrow depression causing low levels of white blood cells, red blood cells, and platelets, which can increase your risk for infection, fatigue, and bleeding
- Loss of appetite, changes in how things taste, nausea
- Diarrhea
- Mouth or throat sores, taste changes, metallic taste during infusion
- Watery eyes or sensitivity to light (photophobia)
- Discoloration of the vein in which the medication is given

Less common

- Dry, peeling, darkening, or cracking skin; discoloration of your nails
- Thinning or brittle hair
- Hand-foot syndrome (palmar-plantar erythrodysesthesia or PPE): rash, swelling, redness, pain and/or peeling of the skin on the palms of hands and soles of feet (usually mild – starts about 5-6 weeks after therapy begins)

How Can I Manage These Side Effects?

- Drink 2-3 quarts of water every day unless your doctor tells you to limit your fluids. This is even more important in the days before and after you have chemotherapy. This will help flush the medications out and help prevent dehydration and constipation. Try to drink a variety of fluids to help provide the calories, sodium (salt), and other electrolytes your body needs. Broths are a good source of sodium, and some sports drinks provide additional electrolytes (check the labels).
- 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.
- Nausea, vomiting: To help prevent nausea, avoid fried, spicy, and fatty foods on the days you receive chemo and for 2-3 days afterwards. Eating small, frequent meals may help. If you have nausea, try foods
and drinks that are ‘easy on the stomach’ - bland foods, ginger ale, dry crackers, and toast.

- Mouth care is very important. To help prevent 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 with a soft toothbrush. (Soften it by running it under warm water). Avoid smoking, alcohol, and mouthwashes that contain alcohol.

- Skin care: Avoid unnecessary or prolonged exposure to the sun – 5-FU may make your skin extra sensitive to sunlight. Use sunscreen with SPF 15 or higher. Wear sunglasses, wide-brimmed hats, long-sleeved shirts, and pants. If you develop a rash, do not put anything on it unless your doctor approves it.

- To help prevent hand-foot syndrome: Keep the palms of your hands and the soles of your feet moist; reduce friction and heat exposure to hands and feet for one week after treatment.

When Should I Call the Doctor?

Call 911 or go to the nearest hospital emergency department if you have life-threatening symptoms such as signs of severe allergic reaction:
Swelling or tingling in your face, tongue, mouth, or throat; chest tightness; wheezing; trouble breathing or swallowing; dizziness, shortness of breath; heart palpitations; or hives.

Please let us now 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 or skin irritation
- unusual bruising or bleeding: Bleeding lasts more than 10-15 minutes or that causes dizziness; black or bloody stools; vomit that is bloody or that looks like coffee grounds; blood in your urine or phlegm, unusually heavy menstrual bleeding, spontaneous bleeding from your gums or nose, or superficial bleeding into the skin (looks like rash of pinpoint red/purple spots (petechiae)

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Call your doctor as soon as possible if you have:

- mouth or throat sores that make it difficult to eat or drink
- diarrhea 3 or more times in 24 hours or diarrhea with weakness
- nausea or vomiting not relieved by prescribed medication or that prevents you from eating or drinking

What Else Do I Need to Know About 5-FU?

- Ice chips 15 minutes before and after your infusion of 5-FU may reduce mouth sores.
- You may get drowsy or dizzy from 5-FU. Avoid tasks that require you to be alert - like driving - until you know how it will affect you.
- Avoid unnecessary or prolonged exposure to sunlight and to wear protective clothing, sunglasses, and sunscreen. Fluorouracil may make your skin very sensitive to sunlight.
- Do not get pregnant or father a child while receiving 5-FU. Both men and women should use birth control - barrier methods of contraception such as condoms are preferred. Fluorouracil may harm the fetus. Talk to your doctor about when pregnancy or fathering a child would be safe after treatment has ended.
- Do not use aspirin or any product that has aspirin in it (such as some cold medicines) unless you have talked to your doctor first.
- Discuss whether you can drink alcohol with your doctor.
- Heart problems are a serious, but rare, adverse reaction to 5-FU. People with a history of heart disease are at higher risk. Report any chest pain to your doctor.
- If you would like more information about 5-FU, talk to your doctor or pharmacist.