

## Medication Information Sheet

**fluorouracil** (flue-row-YOUR-a-sill)

*This document provides general information about your medication. It does not replace the advice of your health care professional. Always discuss your therapy with your health care professional and refer to the package insert for more details.*

**Other Name:** 5-FU, 5-fluorouracil

**Appearance:** Colourless to faint yellow solution ; may be mixed into larger volumes of fluids

**What is this medication for?**

- For treating breast, colorectal or other digestive system cancers, and many other types of cancer

**What should I do before I have this medication?**

- Tell your health care team if you have or had significant medical condition(s), especially if you have or had:
  - recent major surgery
  - liver or kidney problems
  - heart problems, including irregular heartbeat, or
  - any allergies
- Tell your health care team if you have had fluorouracil before, especially if you had severe side effects from it

**Remember to:**

- Tell your health care team about all of the other medications you are taking.
- Keep taking other medications that have been prescribed for you, unless you have been told not to by your health care team.

**Your health care team may ask you to have a blood test to check for DPD deficiency before starting treatment.** DPD deficiency is when you have low or no activity of an enzyme called DPD (dihydropyrimidine dehydrogenase). A deficiency can cause you to have severe side effects from fluorouracil. See the [Testing for people taking capecitabine or 5-fluorouracil \(5-FU\) pamphlet](#) for more information.

## How will this medication affect sex, pregnancy and breastfeeding?

- Talk to your health care team about:
  - ◊ How this treatment may affect your sexual health.
  - ◊ How this treatment may affect your ability to have a baby, if this applies to you.
- This treatment may harm an unborn baby. Tell your health care team if you or your partner are pregnant, become pregnant during treatment, or are breastfeeding.
  - ◊ If there is **any** chance of pregnancy happening, you and your partner together must use **2 effective forms of birth control** at the same time until **6 months** after your last treatment dose. Talk to your health care team about which birth control options are best for you.
  - ◊ Do not use hormonal birth control (such as birth control pills), unless your health care team told you that they are safe. Talk to your health care team about the safest birth control for you.
- Do not breastfeed while on this treatment.

## How is this medication given?

- This drug is given by injection into a vein.
- Talk to your health care team about your treatment schedule.
- If you missed your treatment appointment, talk to your health care team to find out what to do.

### To help prevent Hand-foot syndrome:

Hand-foot syndrome is a side-effect of fluorouracil. It affects the skin on your hands and the bottom of your feet and usually starts with tingling or swelling of your skin. It can become painful, red and numb. In worse cases, your skin may start to peel and you can get blisters or sores.

- Do not do activities that cause rubbing or pressure on your skin, like heavy-duty washing, gripping tools, typing, playing musical instruments, and driving.
- Moisturize your hands and feet often, especially in the skin folds.
- Wear loose, comfortable footwear and clothes.
- Rest and try to keep off your feet.
- Do not let your hands and feet get too hot.

## What else do I need to know while on this medication?

- This medication can interact with other medications and can result in the treatment not working as well or cause severe side effects.
- Make sure your health care team knows about all your medications (prescription, over-the-counter, herbals and supplements), especially if you take medication to treat epilepsy, infections, stomach acid or blood clots. Check with your health care team before starting or stopping any of them.
- **For mild aches and pain or fever:**
  - If you feel unwell, take your temperature before taking any medications for pain or fever. They may hide a fever.
  - You may take acetaminophen (Tylenol®) tablets. Ask your health care team about the right dose for you.
  - Ibuprofen (Advil®, Motrin®), naproxen (Aleve®) or aspirin (acetylsalicylic acid, ASA), including low dose aspirin for heart conditions, may increase your chance of bleeding. Talk to your health care team before you start or stop these medications.
  - **Talk to your health care team or go to the closest emergency room right away if you have a fever.** See the [Fever](#) pamphlet for more information.
- DO protect your skin from the sun. Wear a long sleeved shirt, long pants and a hat. Apply sunscreen with UVA and UVB protection and an SPF of at least 30. Your skin may be more sensitive to the sun and you could develop a bad sunburn or rash more easily.
- DO talk to your health care team about your risk of getting other cancers after this treatment.
- DO NOT smoke or drink alcohol while on treatment without talking to your health care team first. Smoking and drinking can make side effects worse and make your treatment not work as well.

## What are the side effects of this medication?

The following table lists side effects that you may have when getting fluorouracil. The table is set up to list the most common side effects first and the least common last. It is unlikely that you will have all of the side effects listed and you may have some that are not listed.

Read over the side effect table so that you know what to look for and when to get help. Refer to this table if you experience any side effects while on fluorouracil.

| Side effects and what to do  | When to contact health care team?  |
|--|--|
| <b>Very Common Side Effects (in 50 or more out of 100 people)</b>  |  |
| <p><b>Low neutrophils (white blood cells) in the blood (neutropenia)</b></p> <p><b>(More likely with fast injections; May be severe)</b></p> <p>When neutrophils are low, you are at risk of getting an infection more easily. Ask your health care team for the <a href="#">Neutropenia (Low white blood cell count)</a> pamphlet for more information.</p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• If you feel hot or unwell (for example if you have chills or a new cough), you <b>must</b> check your temperature to see if you have a fever.</li> <li>• Do not take medications that treat a fever before you take your temperature (for example, Tylenol®, acetaminophen, Advil® or ibuprofen).</li> <li>• Do not eat or drink anything hot or cold right before taking your temperature.</li> </ul> <p>You have a fever if your temperature taken in your mouth (oral temperature) is:</p> <ul style="list-style-type: none"> <li>• 38.3°C (100.9°F) or higher at any time</li> <li>OR</li> <li>• 38.0°C (100.4°F) or higher for at least one hour.</li> </ul> <p><b>What to do?</b></p> <p><b>If your health care team has told you that you have low neutrophils:</b></p> <ul style="list-style-type: none"> <li>• Wash your hands often to prevent infection.</li> <li>• Check with your health care team before getting any vaccines, surgeries, medical procedures or visiting your dentist.</li> <li>• Keep a digital thermometer at home so you can easily check for a fever.</li> </ul> <p><b>If you have a fever:</b></p> <p><b>If you have a fever, try to contact your health care team. If you are unable to talk to the team for advice, you must get emergency medical help right away.</b></p> | <p>If you have a fever, try to contact your health care team. If you are unable to talk to the team for advice, you <b>MUST</b> get emergency medical help right away.</p> |

| Side effects and what to do   | When to contact health care team?  |
|---|--|
| <b>Very Common Side Effects (in 50 or more out of 100 people)</b>   |  |
| <p><b>Low platelets in the blood</b></p> <p><b>(More likely with fast injections; May be severe)</b></p> <p>When your platelets are low, you are at risk for bleeding and bruising. Ask your health care team for the <a href="#">Low Platelet Count</a> pamphlet for more information.</p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• Watch for signs of bleeding:           <ul style="list-style-type: none"> <li>◦ bleeding from your gums</li> <li>◦ unusual or heavy nosebleeds</li> <li>◦ bruising easily or more than normal</li> <li>◦ black coloured stools (poo) or blood in your stools (poo)</li> <li>◦ coughing up red or brown coloured mucus</li> <li>◦ dizziness, constant headache or changes in your vision</li> <li>◦ heavy vaginal bleeding</li> <li>◦ red or pink coloured urine (pee)</li> </ul> </li> </ul> <p><b>What to do?</b></p> <p><b>If your health care team has told you that you have low platelets:</b></p> <ul style="list-style-type: none"> <li>• Tell your pharmacist that your platelet count may be low before taking any prescriptions or over-the-counter medication.</li> <li>• Check with your healthcare team before you go to the dentist.</li> <li>• Take care of your mouth and use a soft toothbrush.</li> <li>• Try to prevent cuts and bruises.</li> <li>• Ask your health care team what activities are safe for you.</li> <li>• Your treatment may have to be delayed if you have low platelets. Your health care team may recommend a blood transfusion.</li> </ul> <p><b>If you have signs of bleeding:</b></p> <ul style="list-style-type: none"> <li>• If you have a small bleed, clean the area with soap and water or a saline (saltwater) rinse. Apply pressure for at least 10 minutes.</li> </ul> <p><b>If you have bleeding that does not stop or is severe (very heavy), you must get emergency medical help right away.</b></p> | <p>Talk to your health care team if you have any signs of bleeding. If you have bleeding that doesn't stop or is severe (very heavy), you <b>MUST</b> get emergency help right away.</p> |

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|---|--|
| <b>Very Common Side Effects (in 50 or more out of 100 people)</b>   |  |
| <p><b>Changes in heart rhythm</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• These are usually mild and have no symptoms.</li> <li>• Your health care team may monitor this for you.</li> <li>• You may have an irregular heartbeat, shortness of breath, chest pain or fainting spells.</li> </ul> <p><b>What to do?</b></p> <p>Get emergency medical help right away if you have any symptoms of changes in your heart rhythm.</p>  | <p>Get emergency medical help right away</p>   |
| <p><b>Nausea and vomiting (generally mild)</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• Nausea is feeling like you need to throw up. You may also feel light-headed.</li> <li>• You may feel nausea within hours to days after your treatment.</li> </ul> <p><b>What to do?</b></p> <p><b>To help prevent nausea:</b></p> <ul style="list-style-type: none"> <li>• It is easier to prevent nausea than to treat it once it happens.</li> <li>• Drink clear liquids and have small meals. Get fresh air and rest.</li> <li>• Do not eat spicy, fried foods or foods with a strong smell.</li> <li>• Limit caffeine (like coffee, tea) and avoid alcohol.</li> </ul> <p><b>If you have nausea or vomiting:</b></p> <ul style="list-style-type: none"> <li>• Take your anti-nausea medication(s) as prescribed.</li> <li>• Ask your health care team for the <a href="#">Nausea &amp; Vomiting</a> pamphlet for more information.</li> <li>• Talk to your health care team if: <ul style="list-style-type: none"> <li>◦ nausea lasts more than 48 hours</li> <li>◦ vomiting lasts more than 24 hours or if it is severe</li> </ul> </li> </ul> | <p>Talk to your healthcare team if nausea lasts more than 48 hours or vomiting lasts more than 24 hours or if it is severe</p> |

| Side effects and what to do   | When to contact health care team?   |
|---|---|
| <b>Common Side Effects (in 25 to 49 out of 100 people)</b>  |   |
| <p><b>Diarrhea (may be severe)</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>Loose, watery, unformed stool (poo) that may happen days to weeks after you get your treatment.</li> </ul> <p><b>What to do?</b></p> <p><b>If you have diarrhea:</b></p> <ul style="list-style-type: none"> <li>Take anti-diarrhea medication if your health care team prescribed it or told you to take it.</li> <li>Do not eat foods or drinks with artificial sweetener (like chewing gum or 'diet' drinks), coffee and alcohol.</li> <li>Eat many small meals and snacks instead of 2 or 3 large meals.</li> <li>Drink at least 6 to 8 cups of liquids each day, unless your health care team has told you to drink more or less.</li> <li>Talk to your health care team if you can't drink 6 to 8 cups of liquids each day when you have diarrhea. You may need to drink special liquids with salt and sugar, called Oral Rehydration Therapy.</li> <li>Talk to your health care team if your diarrhea does not improve after 24 hours of taking diarrhea medication or if you have diarrhea more than 7 times in one day.</li> </ul> <p>Ask your health care team for the <a href="#">Diarrhea</a> pamphlet for more information.</p> | <p>Talk to your health care team if no improvement after 24 hours of taking diarrhea medication or if severe (more than 7 times in one day)</p> |
| <p><b>Liver problems (may be severe)</b></p> <p>Your health care team may check your liver function with a blood test. The liver changes do not usually cause any symptoms.</p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>Rarely, you may develop yellowish skin or eyes, unusually dark pee or pain on the right side of your belly. This may be severe.</li> </ul> <p><b>What to do?</b></p> <p><b>If you have any symptoms of liver problems, get emergency medical help right away.</b></p>  | <p>Get emergency medical help right away</p>  |

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|--|---|
| <b>Common Side Effects (in 25 to 49 out of 100 people)</b>   |   |
| <p><b>Mouth sores (may be severe)</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• Round, painful, white or gray sores inside your mouth that can occur on the tongue, lips, gums, or inside your cheeks.</li> <li>• In more severe cases they may make it hard to swallow, eat or brush your teeth.</li> <li>• They may last for 3 days or longer.</li> </ul> <p><b>What to do?</b></p> <p><b>To help prevent mouth sores:</b></p> <ul style="list-style-type: none"> <li>• Take care of your mouth by gently brushing and flossing regularly.</li> <li>• Rinse your mouth often with a homemade mouthwash.</li> <li>• To make a homemade mouthwash, mix 1 teaspoonful of baking soda and 1 teaspoonful of salt in 4 cups (1L) of water.</li> <li>• Do not use store-bought mouthwashes, especially those with alcohol, because they may irritate your mouth.</li> </ul> <p><b>If you have mouth sores:</b></p> <ul style="list-style-type: none"> <li>• Avoid hot, spicy, acidic, hard or crunchy foods.</li> <li>• Your doctor may prescribe a special mouthwash to relieve mouth sores and prevent infection.</li> <li>• Talk to your health care team as soon as you notice mouth or lip sores or if it hurts to eat, drink or swallow.</li> </ul> <p>Ask your health care team for the <a href="#">Oral Care (Mouth Care)</a> pamphlet for more information.</p> | <p>Talk to your health care team as soon as you notice mouth or lip sores or if it hurts to eat, drink or swallow</p> |
| <p><b>Eye problems</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• Your eyes may feel dry, irritated, or painful.</li> <li>• They may look red and have a lot of tears.</li> <li>• They may feel sensitive to light and your vision may be blurry.</li> </ul>   | <p>Contact your health care team as soon as possible</p>  |



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| <b>Common Side Effects (in 25 to 49 out of 100 people)</b>  |                                   |
| <p><b>What to do?</b></p> <ul style="list-style-type: none"> <li>• Avoid wearing contact lenses.</li> <li>• Wear sunglasses with UV protection.</li> <li>• Use protective eyewear (goggles or helmet with face mask) when playing sports, mowing the lawn or doing anything that may get particles or fumes in your eyes.</li> <li>• You may try artificial tears (eye drops) or ointment.</li> </ul> |                                   |

| Side effects and what to do  | When to contact health care team?  |
|--|--|
| <b>Less Common Side Effects (in 10 to 24 out of 100 people)</b>  |  |
| <p><b>Rash; dry, itchy skin, Skin sensitivity to sunlight</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• You may have cracked, rough, flaking or peeling areas of the skin.</li> <li>• Your skin may look red and feel warm, like a sunburn.</li> <li>• Your skin may itch, burn, sting or feel very tender when touched.</li> <li>• <b>The rash may be seen in areas where you have had radiation before.</b></li> <li>• When your skin is exposed to the sun, you may get an itchy, red rash that looks like a sunburn or other skin reactions.</li> </ul> <p><b>What to do?</b></p> <ul style="list-style-type: none"> <li>• Use fragrance-free skin moisturizer every day.</li> <li>• Protect your skin from the sun and the cold. When you are in the sun, wear long sleeved shirts, long pants and a hat.</li> <li>• Use sunscreen with UVA and UVB protection and an SPF of at least 30.</li> <li>• Use a lip balm with sunscreen on your lips.</li> <li>• Avoid perfumed products and lotions that contain alcohol.</li> <li>• Drink 6 to 8 cups of non-alcoholic, non-caffeinated liquids each day, unless your health care team has told you to drink more or less.</li> </ul> <p><b>Rash may be severe in some rare cases and cause your skin to blister or peel. If this happens, get emergency medical help right away.</b></p> | <p>Talk to your health care team if it does not improve or if it is severe</p> |

| Side effects and what to do   | When to contact health care team?  |
|---|--|
| <b>Less Common Side Effects (in 10 to 24 out of 100 people)</b>   |  |
| <p><b>Low appetite</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• Loss of interest in food or not feeling hungry.</li> <li>• Weight loss.</li> </ul> <p><b>What to do?</b></p> <ul style="list-style-type: none"> <li>• Try to eat your favourite foods.</li> <li>• Eat small meals throughout the day.</li> <li>• You may need to take meal supplements to help keep your weight up.</li> <li>• Talk to your health care team if you have no appetite.</li> </ul> <p>Ask your health care team for the <a href="#">Loss of Appetite</a> pamphlet for more information.</p> | <p>Talk to your health care team if it does not improve or if it is severe</p> |
| <p><b>Hair thinning or loss (generally mild)</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• Your hair may begin to become thin or fall out during or after treatment.</li> <li>• In most cases, your hair will grow back after treatment, but the texture or colour may change.</li> <li>• In very rare cases, hair loss may be permanent.</li> </ul> <p><b>What to do?</b></p> <ul style="list-style-type: none"> <li>• Use a gentle soft brush.</li> <li>• Do not use hair sprays, bleaches, dyes and perms.</li> </ul>   | <p>Talk to your health care team if this bothers you</p>                       |
| <p><b>Rash on your hands and feet (hand-foot syndrome)</b></p> <p><b>(More likely with long infusions)</b></p> <p><b>What to look for?</b></p> <ul style="list-style-type: none"> <li>• Tingling or swelling of the skin on the palms of your hands and the bottoms of your feet. This can become painful, red and numb.</li> <li>• In worse cases your skin may start to peel and you can get blisters or sores.</li> <li>• This may happen days or weeks after you start treatment.</li> </ul>  | <p>Talk to your health care team if it does not improve or if it is severe</p> |

| Side effects and what to do   | When to contact health care team? |
|---|-----------------------------------|
| <b>Less Common Side Effects (in 10 to 24 out of 100 people)</b>   |                                   |
| <p><b>What to do?</b></p> <p><b>To help prevent Hand-foot syndrome:</b></p> <ul style="list-style-type: none"> <li>• Do not do activities that cause rubbing or pressure on your skin, like heavy-duty washing, gripping tools, typing, playing musical instruments, and driving.</li> <li>• Moisturize your hands and feet often, especially in the skin folds.</li> <li>• Wear loose, comfortable footwear and clothes.</li> <li>• Rest and try to keep off your feet.</li> <li>• Do not let your hands and feet get too hot.</li> </ul> <p>Ask your health care team for the <a href="#">Hand-foot syndrome</a> pamphlet for more information.</p> |                                   |

**Other rare, but serious side effects are possible.**

**If you experience ANY of the following, speak to your cancer health care provider or get emergency medical help right away:**

- shortness of breath, pain in the chest that may spread to the arm or belly, coughing up blood
- swelling in your legs, ankles and belly
- pain, swelling and hardening of the vein in an arm or leg
- have trouble seeing, speaking, or using your arms and legs
- confusion, severe weakness, problems with your balance or have falls
- unusual muscle spasms, tremors, irregular or jerky movements
- redness or rash in areas where you had radiation before
- itchiness, rash, swollen lips, face or tongue, chest and throat tightness, during or shortly after the medication is given
- have red-brown coloured pee

### Who do I contact if I have questions or need help?

My cancer health care provider is: \_\_\_\_\_

During the day I should contact: \_\_\_\_\_

Evenings, weekends and holidays: \_\_\_\_\_

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### Other Notes:

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### April 2023 Updated information sheet

For more links on how to manage your symptoms go to [www.cancercareontario.ca/symptoms](http://www.cancercareontario.ca/symptoms).

*The information set out in the medication information sheets, regimen information sheets, and symptom management information (for patients) contained in the Drug Formulary (the "Formulary") is intended to be used by health professionals and patients for informational purposes only. The information is not intended to cover all possible uses, directions, precautions, drug interactions or side effects of a certain drug, nor should it be used to indicate that use of a particular drug is safe, appropriate or effective for a given condition.*

*A patient should always consult a healthcare provider if he/she has any questions regarding the information set out in the Formulary. The information in the Formulary is not intended to act as or replace medical advice and should not be relied upon in any such regard. All uses of the Formulary are subject to clinical judgment and actual prescribing patterns may not follow the information provided in the Formulary.*