

## Patient Treatment Information

# 5FU + LEUCOVORIN + BEVACIZUMAB

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Your chemotherapy treatment is called 5FU + leucovorin + bevacizumab. It is commonly used to treat colon and rectal cancer and has also been used to treat other diseases. 5FU + leucovorin + bevacizumab is made up of three chemotherapy drugs:

- 5-fluorouracil (5FU), (five-flure-oh-YOOR-a-sill)
- leucovorin (loo-koe-VOR-in)
- bevacizumab (be-va-SIZ-you-mab) or Avastin (ah-VA-stin)

5FU prevents cancer cells from dividing and growing, and can eventually cause cancer cells to shrink and die. Leucovorin is used to increase the activity of 5FU. Bevacizumab is a new type of drug, called a monoclonal antibody, which targets cancer cells more precisely than chemotherapy drugs.

### What Do I Need to Know Before Starting Chemotherapy?

Be sure to tell your healthcare provider about any prescription or over-the-counter products you are taking, including dietary supplements, vitamins, herbal medicines and homeopathic remedies.

Use an effective birth control method while you are taking these drugs. Chemotherapy drugs can cause harm to a fetus, so be sure to tell your healthcare provider right away if you or your partner become pregnant.

Avoid breastfeeding during treatment. It is not known if these drugs pass into breast milk.

Some chemotherapy drugs can cause sterility. Talk with your healthcare provider about your options if you want to have children in the future.

Do not get any immunizations or vaccinations while taking chemotherapy drugs without the approval of your healthcare provider.

### What Do I Need to Know Before Starting This Treatment?

5-FU can cause heart problems such as a heart attack, irregular heart beat, angina, electrocardiographic (EKG) changes and heart failure. These side effects may be more common in patients with a history of heart disease. Call your healthcare provider immediately if you develop heart problems.

Bevacizumab can cause nosebleeds. Most nosebleeds are minor, and usually stop on their own. If you have a nosebleed, sit with your head tipped slightly forward, and apply pressure by pinching the bridge of your nose. Call your healthcare provider if you feel dizzy or faint or if the bleeding doesn't stop after 10 to 15 minutes.

Bevacizumab can cause the following rare, but serious, side effects:

- Tearing of the lining of the gastrointestinal tract. Call your healthcare provider right away if you have abdominal pain with nausea, vomiting, blood in your stool, constipation or fever. In rare cases, this side effect can be fatal.
- Slow or incomplete wound healing. Tell your healthcare provider if you have wounds that don't heal. In rare cases, this side effect can be fatal.

Your treatment can interact with other medicines, including:

- Warfarin (Coumadin)
- Cimetidine (Tagamet)

**You should not take this treatment if you:**

- Are allergic to 5FU, leucovorin, bevacizumab or any components of these drugs.
- Have a condition known as dihydropyrimidine dehydrogenase (DPD) deficiency.

### How Is the Treatment Given?

Your healthcare provider will give you your treatment by injection into a vein. The dose you receive will be based on your weight and height. Your healthcare provider will determine the number of treatments you receive.

You may be given medicines to help prevent and control nausea and vomiting before you receive your treatment. These medicines may be given either by mouth or by injection into a vein.

### What Are the Important Side Effects?

All drugs can cause side effects, but every person reacts differently to each drug. The chart below lists important side effects that can occur with your treatment, how often the side effect occurs (common, less common or rare), how to recognize and avoid symptoms and possible interventions. Call your healthcare provider if you have any questions or concerns about side effects.

Side Effect	How to Avoid Symptoms	Possible Interventions
<b>Nausea/Vomiting (Common)</b> <ul style="list-style-type: none"><li>• Feeling queasy or sick to your stomach</li><li>• Early nausea and vomiting usually stops within 24 hours</li><li>• Delayed nausea and vomiting develops more than 24 hours after treatment and lasts for three to seven days</li></ul>	<ul style="list-style-type: none"><li>• Eat small, frequent meals and bland foods—such as bananas, rice, applesauce and toast.</li><li>• Eat food cold or at room temperature so the smell of food will not bother you.</li><li>• Avoid fried, spicy or fatty foods.</li><li>• Eat and drink slowly.</li><li>• Drink plenty of liquids during the day, but to avoid bloating, do not drink during meals.</li></ul>	<ul style="list-style-type: none"><li>• You will be given medicine to help reduce nausea and vomiting.</li></ul>
<b>Diarrhea (Common)</b> <ul style="list-style-type: none"><li>• Loose or watery stools several times a day</li><li>• Abdominal cramping, gas and bloating</li></ul>	<ul style="list-style-type: none"><li>• Eat small, frequent meals and bland foods—such as bananas, rice, applesauce and toast.</li><li>• Avoid caffeine; alcohol; raw fruits and vegetables; raw eggs; undercooked meats; spicy, fatty and greasy foods; milk and dairy products; foods that cause gas, such as beans and other legumes; high fiber and high-fat foods; foods left un-refrigerated for more than two hours (one hour for egg dishes and cream or mayonnaise-based foods); bulk laxatives; and stool softeners.</li></ul>	<ul style="list-style-type: none"><li>• Drink eight to ten glasses of clear liquids every day.</li><li>• Your healthcare provider may prescribe medicine to help treat diarrhea.</li></ul>
<b>Mouth Sores and Pain (Common)</b> <ul style="list-style-type: none"><li>• Pain, swelling and redness of the mouth, tongue and throat</li><li>• “Coated tongue”</li><li>• Difficulty talking, swallowing or eating</li><li>• Bleeding ulcers and infection</li></ul>	<ul style="list-style-type: none"><li>• Brush teeth two to four times a day using a soft bristle brush and fluoride toothpaste.</li><li>• Use non-waxed dental floss daily.</li><li>• Ask your healthcare provider to recommend a mouthwash that does not contain alcohol.</li><li>• Sip water during the day and use sugar-free candy or gum to keep your mouth wet.</li><li>• Eat food cold or at room temperature.</li><li>• Eat soft or pureed food.</li><li>• Avoid food that is acidic, spicy, salty, dry or rough, such as toast.</li></ul>	<ul style="list-style-type: none"><li>• You may be given medicine to help treat pain.</li><li>• You may be given medicine to treat fungal or viral infections.</li></ul>

Side Effect	How to Avoid Symptoms	Possible Interventions
<b>Infection (Common)</b> <ul style="list-style-type: none"> <li>• Fever and chills</li> <li>• Painful urination</li> <li>• Sore throat and cough</li> <li>• Nasal congestion</li> <li>• Swelling or redness of the skin at the site of a wound</li> </ul>	<ul style="list-style-type: none"> <li>• Wash your hands often.</li> <li>• Brush and floss your teeth daily.</li> <li>• Clean cuts right away with warm water, soap and antiseptic.</li> <li>• When your white blood cell count is low, stay away from crowds and people with colds or other illnesses.</li> </ul>	<ul style="list-style-type: none"> <li>• You may be given medicine to increase your white blood cell count.</li> <li>• You may be given an antibiotic to treat or prevent infection.</li> <li>• Your healthcare provider may decrease your chemotherapy dose or delay further chemotherapy.</li> </ul>
<b>Anemia (Common)</b> <ul style="list-style-type: none"> <li>• Fatigue or weakness</li> <li>• Dizziness</li> <li>• Pale skin</li> <li>• Feeling out of breath</li> <li>• Feeling cold</li> <li>• Difficulty thinking or concentrating, forgetfulness</li> <li>• Decreased ability to work</li> </ul>	<ul style="list-style-type: none"> <li>• Plan rest periods throughout the day.</li> <li>• Organize daily activities so that you conserve your energy.</li> <li>• Try to eat a well balanced diet and drink plenty of fluids.</li> <li>• When changing positions from sitting or lying down, stand up slowly to avoid getting dizzy.</li> </ul>	<ul style="list-style-type: none"> <li>• You may be given medicine to increase your red blood cell count.</li> <li>• Your healthcare provider may decrease your chemotherapy dose or delay further chemotherapy.</li> </ul>
<b>Alopecia or Hair Loss (Common)</b> <ul style="list-style-type: none"> <li>• More than normal amount of hair loss in your brush, in the shower or on your pillow after sleeping</li> <li>• Loss of body hair</li> </ul>	<p>Alopecia cannot be prevented but here are tips to help with hair loss:</p> <ul style="list-style-type: none"> <li>• Use a soft hairbrush. Do not use brush rollers, color treat your hair or get a permanent.</li> <li>• Avoid daily hair washing, use a mild shampoo and avoid using a hairdryer, or use a low setting if you must use one.</li> <li>• Have your hair cut short; this will make it look fuller.</li> <li>• Your insurance might cover a wig. If you would like a wig, ask your healthcare provider for a prescription for a "hair prosthesis". Your hair color and style can be better matched if you shop for a wig before losing a lot of hair.</li> <li>• Use sunscreen or wear a hat or scarf to protect your scalp from the sun.</li> </ul>	
<b>Anorexia or Appetite Loss (Common)</b> <ul style="list-style-type: none"> <li>• Not having an appetite</li> <li>• Feeling too nauseous to eat</li> <li>• Metallic or medicinal taste</li> <li>• Change in taste causing dislike for certain foods</li> </ul>	<ul style="list-style-type: none"> <li>• Try eating six to eight small meals or snacks each day instead of three larger meals.</li> <li>• Vary your diet and try new foods and recipes.</li> <li>• Take a walk before meals, when possible. This may make you feel hungrier.</li> <li>• Eat with friends or family. When eating alone, listen to the radio or watch TV.</li> </ul>	<ul style="list-style-type: none"> <li>• Cook dinners ahead of time and freeze them in small portions so that cooking smells are minimized.</li> <li>• Let others help with food, but ask that foods be prepared in small portions that can be frozen. And don't hesitate to let them know which foods to avoid.</li> <li>• Add mild spices to change flavor.</li> <li>• It might be helpful to have a program, such as Meals on Wheels, deliver food to you.</li> </ul>
<b>Neuropathy (Less Common)</b> <ul style="list-style-type: none"> <li>• Numbness or tingling feeling in the hands or feet</li> <li>• Muscle cramps</li> <li>• Loss of balance</li> <li>• Difficulty buttoning buttons or picking up objects</li> <li>• Decreased awareness of heat or cold in fingertips and toes</li> <li>• Difficulty hearing</li> </ul>	<ul style="list-style-type: none"> <li>• Try to avoid the cold or extreme heat.</li> <li>• Wear mittens or gloves, socks and scarves.</li> <li>• If your fingers are numb, be careful with sharp objects.</li> <li>• Beware of hot coffee mugs, pots and pans and dishwasher—you may not feel the heat until you are burned.</li> <li>• If you feel unsteady, be careful on stairs and in the shower.</li> </ul>	<ul style="list-style-type: none"> <li>• Your healthcare provider may decrease your chemotherapy dose or delay further chemotherapy.</li> </ul>
<b>Bleeding (Less Common)</b> <ul style="list-style-type: none"> <li>• Unusual bleeding, easy bruising</li> <li>• Black or tar-like stools</li> <li>• Blood in your urine</li> <li>• Pinpoint red spots on your skin</li> <li>• Bleeding gums or nosebleeds</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid aspirin and aspirin-like drugs, such as ibuprofen.</li> <li>• Use caution with sharp objects, such as razors and nail cutters.</li> <li>• Avoid activities that can cause cuts, bumps and bruises.</li> </ul>	<ul style="list-style-type: none"> <li>• You may be given medicine to increase your platelet count.</li> <li>• Your healthcare provider may decrease your chemotherapy dose or delay further chemotherapy.</li> </ul>

Side Effect	How to Avoid Symptoms	Possible Interventions
<p><b>Hand-Foot Syndrome (Less common, occurs only with 5FU continuous infusion)</b></p> <ul style="list-style-type: none"> <li>Swelling or redness in the hands and feet that can prevent normal activity</li> <li>Cracked or peeling skin</li> <li>Tingling, numbness or pain in the hands or soles of the feet</li> </ul>	<ul style="list-style-type: none"> <li>Wear gloves to wash dishes.</li> <li>Avoid using harsh household cleaners.</li> <li>Avoid prolonged exposure to heat or pressure.</li> <li>Use creams or moisturizers regularly. Try covering your hands with cotton gloves.</li> <li>Avoid perfume, cologne or aftershave since these products can be irritating to the skin.</li> </ul>	<ul style="list-style-type: none"> <li>Your healthcare provider may prescribe a cream to help with skin reactions.</li> <li>Your healthcare provider may need to decrease your chemotherapy dose or delay further chemotherapy.</li> </ul>
<p><b>Constipation (Less Common)</b></p> <ul style="list-style-type: none"> <li>No bowel movement for one to two days</li> <li>Small, hard dry stools</li> <li>Bloating, gas, cramps and pain</li> </ul>	<ul style="list-style-type: none"> <li>Drink plenty of fluids to help loosen your bowels. Drink warm or hot liquids if you do not have mouth sores.</li> <li>Eat foods that are high in fiber, such as bran, vegetables, whole wheat breads and fruit. Add prunes or prune juice, which act as laxatives.</li> <li>Exercise can help loosen bowels.</li> </ul>	<ul style="list-style-type: none"> <li>Your healthcare provider may recommend a stool softener.</li> </ul>

### Are There Other Possible Side Effects?

The chart below lists additional side effects found with this treatment. It does not list all possible side effects. For more information, talk with your healthcare provider.

Common Side Effects	Less Common Side Effects	Rare Side Effects
<ul style="list-style-type: none"> <li>Skin reactions such as rash and discoloration</li> <li>Elevations of liver function tests</li> <li>High blood pressure</li> </ul>	<ul style="list-style-type: none"> <li>Fever</li> <li>Weakness</li> <li>Dry skin</li> <li>Heartburn, stomach ulcers or bleeding</li> <li>Headache</li> <li>Shortness of breath</li> </ul>	<ul style="list-style-type: none"> <li>Sensitivity of the skin to the sun</li> <li>Blood clot related conditions such as stroke and chest pain</li> <li>Heart problems, including congestive heart failure</li> <li>Protein in urine</li> </ul>

