

## Patient Treatment Information

# FOLFOX + Bevacizumab

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

- 5-fluorouracil (5-FU), (flure-oh-YOOR-a-sill) or Aducril® (Add-roo-sil)
- leucovorin (loo-koe-VOR-in)
- oxaliplatin (ox-AL-i-pla-tin) or Eloxatin® (ee-LOX-a-tin)
- bevacizumab (be-va-SIZ-you-mab) or Avastin® (ah-VA-stin)

5FU and oxaliplatin prevent 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 Treatment?

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 FOLFOX + Bevacizumab?

5-FU and bevacizumab can cause heart problems such as a heart attack, irregular heart beat, angina and heart failure. This side effect may be more common in patients with a history of heart disease. Call your healthcare provider immediately if you have back pain, flushing or chest tightness.

Oxaliplatin commonly causes some nerve cells to stop functioning properly. This condition is called neuropathy (see "What Are the Possible Side Effects?"). Oxaliplatin can cause two types of neuropathy:

- Early onset neuropathy starts within a few hours to two days after starting treatment and usually goes away within 14 days. Exposure to cold temperatures and cold objects can cause symptoms or make symptoms worse. Avoid cold weather, cold foods and cold drinks for five days after treatment.
- Oxaliplatin can cause chronic neuropathy that can last for weeks or months. Chronic neuropathy usually starts after several treatments with oxaliplatin.

A less common side effect of oxaliplatin-related neuropathy is called pharyngolaryngeal dysesthesia. This is the sensation of tightness or discomfort in the throat, which can make it feel difficult to breathe or swallow. Although this symptom may be frightening, it is just a sensation and does not interfere with breathing. The sensation usually goes away on its own after a few minutes.

Oxaliplatin can cause irritation if it accidentally leaks out of the vein. Tell your healthcare provider right away if you have redness, pain, burning or swelling around the injection site during your treatment.

Oxaliplatin can damage the kidneys. Tell your healthcare provider if you have a history of kidney disease.

Oxaliplatin can cause a severe allergic reaction a few minutes after treatment. Tell your healthcare provider right away if you develop a rash, swollen lips or tongue or if you have trouble breathing.

In rare cases, oxaliplatin can cause a lung condition called pulmonary fibrosis. Tell your healthcare provider immediately if you suddenly develop a cough or are short of breath,

In rare cases, the allergic reactions and pulmonary fibrosis caused by oxaliplatin can be life-threatening.

In rare cases, bevacizumab can cause severe infusion reactions, such as trouble breathing, very high blood pressure, wheezing, chest pain, headache, chills and sweating. If this reaction occurs, it is usually with the first dose.

Bevacizumab can cause gastrointestinal perforation (holes in the stomach, intestines or colon) that must be repaired through surgery. Call your healthcare provider right away if you have abdominal pain with nausea, vomiting, blood in your stool, constipation or fever.

Bevacizumab can cause slow or incomplete wound healing. Tell your healthcare provider if you have wounds that do not heal. You should not have any elective surgery while being treated with bevacizumab.

Mild bleeding, such as nosebleeds, is common with bevacizumab. If you have a nosebleed, sit with your head tipped slightly forward and pinch 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 may cause a severe increase in blood pressure. Your healthcare provider will check your blood pressure regularly and may give you medicine to treat high blood pressure.

Bevacizumab can cause too much protein in the urine, which can lead to kidney damage. Your healthcare provider will check your urine regularly for signs of kidney damage.

In rare cases, bevacizumab can cause serious blood clots that can result in stroke. Older adults may be most likely to develop blood clots. It can also cause other heart problems, so tell your healthcare provider if you have a history of heart disease.

Your treatment can interfere with other medicines, including:

- Warfarin (Coumadin®)
- Cimetidine (Tagamet®)
- Drugs that cause harm to the kidney, such as amphotericin B, tobramycin, gentamicin or amikacin
- Thyroid medications
- Chloramphenicol (Chloromycetin®)
- Ganciclovir
- Interferon

Please note this list is a summary and does not contain all possible drug interactions. Contact your healthcare provider if you are taking any medications that can interact with your treatment.

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

- Are allergic to 5FU, leucovorin, oxaliplatin, other platinum agents, bevacizumab or any components of these drugs
- If you 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.

If you are given any medicine to take at home, do not share it with others. Sharing this medication with anyone else could be harmful.

## **When Should I Call My Healthcare Provider?**

Call your healthcare provider right away if you have any of the following symptoms:

- Shaking chills or fever 100.5 degrees F or higher
- Unusual bleeding, easy bruising or pinpoint red spots on your skin
- Vomiting that is severe or lasts several hours
- Painful or frequent urination or blood in your urine

- Diarrhea that causes an additional four bowel movements a day, diarrhea that lasts more than one day, diarrhea at night or diarrhea with fever, cramps or bloody stools
- Irregular or rapid heart beat, chest pain, chest tightness or shortness of breath
- Dizziness or feeling lightheaded
- Inability to eat or weight loss

## What Are the Possible Side Effects?

All drugs can cause side effects, but every person reacts differently to each drug. The following chart lists the possible side effects that can occur with your treatment, how to recognize and minimize symptoms and possible treatments. The side effects are grouped by how often the side effect occurs: Common (occurs in more than 25 percent of patients), Less Common (occurs in 5 to 25 percent of patients) or Rare (occurs in less than 5 percent of patients).

Side Effect	How to Minimize Side Effect	Possible Treatments
<p><b>Risk of Infection (Common)</b></p> <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>
<p><b>Nausea/Vomiting (Common. Symptoms are generally mild to moderate.)</b></p> <ul style="list-style-type: none"> <li>• Feeling queasy or sick to your stomach</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, drink small amounts of liquid during meals.</li> </ul>	<ul style="list-style-type: none"> <li>• You will be given medicine to help reduce nausea and vomiting.</li> </ul>
<p><b>Diarrhea (Common. Symptoms are generally mild to moderate.)</b></p> <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 unrefrigerated 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>
<p><b>Neuropathy (Common. Symptoms are generally mild to moderate but can be severe.)</b></p> <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> <li>• Avoid exposure to cold, including cold foods and drinks, for five days after treatment.</li> </ul>	<ul style="list-style-type: none"> <li>• Your healthcare provider may decrease your chemotherapy dose or delay further chemotherapy.</li> </ul>

Side Effect	How to Minimize Side Effect	Possible Treatments
<b>Alopecia or Hair Loss (Common)</b> <ul style="list-style-type: none"> <li>• Hair coming out 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 you cope with your 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>• Use a mild shampoo and avoid daily washing.</li> <li>• 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. Ask your doctor for a prescription for a "hair prosthesis" if you feel a wig is right for you. Try to shop for a wig before losing a lot of hair so the color and style can be better matched.</li> <li>• Be sure to use sunscreen or wear a hat or scarf to protect your scalp from the sun.</li> </ul>	
<b>Mouth Sores and Pain (Less Common. Symptoms are generally mild.)</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>
<b>Hand-Foot Syndrome (Less Common. Symptoms are generally mild to moderate but can be severe.)</b> <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 decrease your chemotherapy dose or delay further chemotherapy.</li> </ul>
<b>Constipation (Less Common. Symptoms are generally mild.)</b> <ul style="list-style-type: none"> <li>• Difficulty passing stools</li> <li>• Decrease in the normal frequency of bowel movements</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. Try 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>
<b>Anemia (Rare)</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> </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>• 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>

## What Are the Other Possible Side Effects?

The chart below lists additional side effects found with the individual drugs in 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 and nail reactions, such as discoloration</li> <li>• Fatigue or weakness</li> </ul>	<ul style="list-style-type: none"> <li>• Shortness of breath</li> <li>• Cough or runny nose</li> <li>• Pain in the chest, back, joints or muscles</li> <li>• Headache</li> <li>• Insomnia</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>• Decrease in heart rate</li> </ul>

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