

## For the Patient: UBRAVTTCAP

Other Names: Palliative Therapy for Metastatic Breast Cancer using Trastuzumab, Tucatinib, and Capecitabine

**U** = Undesignated

**BR** = BREast

**AV** = AdVanced

**T** = Trastuzumab

**T** = Tucatinib

**CAP** = CAPecitabine

### **ABOUT THESE MEDICATIONS**

#### **What are these drugs used for?**

- Trastuzumab, tucatinib, and capecitabine are drugs used to treat advanced breast cancer after other treatments have been completed.

#### **How do these drugs work?**

- Trastuzumab helps your immune system to interfere with how cancer cells grow and divide.
- Tucatinib is a targeted treatment that slows down or stops the growth of cancer cells.
- Capecitabine works by interfering with dividing cells and preventing an increase in the number of cells.

### **INTENDED BENEFITS**

- This therapy is being given to destroy and/or limit the growth of cancer cells in your body. This treatment may improve your current symptoms, and delay the onset of new symptoms.
- It may take several treatments before your doctor can judge whether or not this treatment is helping.

### **TREATMENT SUMMARY**

#### **How are these drugs given?**

- Trastuzumab is given directly into the vein (intravenous, IV). Tucatinib and capecitabine are tablets taken by mouth.
- You will receive trastuzumab at the clinic by a chemotherapy nurse on the first day of treatment **for one day only**. You will be given tucatinib and capecitabine tablets to start on the same day. Tucatinib is to be taken twice a day, every day for 21 days (tucatinib is taken continuously, with no days off). Capecitabine is to be taken twice a day, every day for 14 days in a row, followed by a 7 day break.
- This three week or 21-day period of time is called a “cycle”. The cycles are repeated as long as you are benefiting from chemotherapy, and not having too many side effects, as determined by your oncologist.
- Each treatment will take from 30 to 90 minutes. Your first treatment will take longer, as the nurse will review information on the drugs with you. The treatment may be followed by an observation time, to ensure that the trastuzumab does not cause any infusion related side effects. If you do not experience any infusion related side effects, the observation time may be shortened, as determined by your chemotherapy nurse.
- Tucatinib and capecitabine will be given to you by a pharmacist each time you come in for a trastuzumab treatment. You will be given enough tablets so you can take them while at home.

The calendar below shows how the medications are given each 3 week cycle.

Cycle 1 and onwards:

C Y C L E	DATE	TREATMENT PLAN
1		▶ Week 1 → trastuzumab IV on Day 1 → tucatinib orally in the a.m. and p.m. x 7 days → capecitabine orally in the a.m. and p.m. x 7 days.
		▶ Week 2 → tucatinib orally in the a.m. and p.m. x 7 days → capecitabine orally in the a.m. and p.m. x 7 days.
		▶ Week 3 → tucatinib orally in the a.m. and p.m. x 7 days → no capecitabine

Treatment is continued as long as you are benefiting from treatment and not having too many side effects.

#### What will happen when I get my drugs?

- A blood test is done each cycle, on or before the first day of each treatment cycle. The dose and timing of your chemotherapy may be changed based on your blood counts and/or other side effects
- A test to determine how well your heart is working, called a “MUGA” scan, may be done at the beginning of treatment, and periodically throughout treatment.
- You may be given a prescription for anti-nausea medication (to be filled at your regular community pharmacy) that you bring in each time for your treatment. Your chemotherapy nurse will tell you when to take the anti-nausea medication. It is easier to prevent nausea than to treat it once it has occurred, so follow directions closely.

## **SIDE EFFECTS AND WHAT TO DO ABOUT THEM**

Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly important for you to be aware of as they are directly related to the common actions of the drugs in your treatment plan.

Your cancer care team will review the risks of treatment and possible side effects with you before starting treatment. The chemotherapy nurse will review possible side effects of trastuzumab, and how to manage those side effects with you on the day you receive your first treatment. The pharmacist will review how to take tucatinib and capecitabine and possible side effects with you on the day you first pick up your medication.

<b>SERIOUS SIDE EFFECTS DURING TREATMENT</b>	<b>MANAGEMENT</b>
<p><b>Allergic reactions</b> to trastuzumab may rarely occur. Signs of an allergic reaction may include chills, fever, shivering, nausea, vomiting, headache, dizziness, problems breathing, rash and weakness during the infusion. Reactions are less common with later treatments even if you have a reaction with the first treatment.</p>	<p>Tell your nurse <b><i>immediately</i></b> if this happens while you are receiving trastuzumab.</p> <ul style="list-style-type: none"><li>• Your trastuzumab may be temporarily stopped and then given more slowly when restarted.</li><li>• You may be given other drugs to treat the reaction.</li></ul> <p>Contact your oncologist <b><i>immediately</i></b> if this happens after you leave the clinic.</p>
<p><b>Nausea</b> and <b>vomiting</b> may occur. If you are vomiting and it is not controlled, you can quickly become dehydrated.</p>	<p>You may be given a prescription for an anti-nausea drug(s) to take before your chemotherapy treatment and/or at home. <b>It is easier to prevent nausea than treat it once it has occurred</b>, so follow directions closely.</p> <ul style="list-style-type: none"><li>• Drink plenty of liquids.</li><li>• Eat and drink often in small amounts.</li><li>• Try the ideas in <i>Practical Tips to Manage Nausea*</i>.</li></ul> <p>Tell your healthcare team if nausea or vomiting continues or is not controlled with your anti-nausea drug(s).</p>

SERIOUS SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<p><b>Diarrhea</b> commonly occurs. If you have diarrhea and it is not controlled, you can quickly become dehydrated.</p>	<p>To help diarrhea:</p> <ul style="list-style-type: none"> <li>• Drink plenty of fluids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Avoid high fibre foods as outline in <i>Food Choices to Help Manage Diarrhea*</i>.</li> </ul> <p>If you have an increase of less than 4 stools per day more than normal, or a mild increase in ostomy output, start the following:</p> <ul style="list-style-type: none"> <li>• Loperamide (IMODIUM®) 2 mg, take 2 tablets ( 4mg) to start, followed by 1 tablet (2 mg) every 4 hours, or after each unformed stool to a maximum of 8 tablets (16 mg) daily, unless otherwise directed by a physician</li> </ul> <p><b>Stop taking capecitabine</b> and call your cancer doctor if you have four stools a day more than usual or diarrhea during the night, or a moderate increase in ostomy output, as your capecitabine dose may need to be changed.</p> <ul style="list-style-type: none"> <li>• <b>Note:</b> if lactose in milk usually gives you diarrhea, the lactose in the capecitabine tablet may be causing your diarrhea. Take LACTAID® tablets just before your dose.</li> </ul>
<p>Your <b>white blood cells</b> will decrease during or after your treatment. They usually return to normal after your last treatment. White blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, <b>you are at greater risk of having an infection.</b></p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> <li>• Wash your hands often and always after using the bathroom.</li> <li>• Take care of your skin and mouth.</li> <li>• Avoid crowds and people who are sick.</li> <li>• Call your doctor <b>immediately</b> at first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, or burning when you pass urine.</li> </ul>

SERIOUS SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<p>Your <b>platelets</b> may decrease during or after your treatment. They will return to normal after your last treatment. Platelets help to make your blood clot when you hurt yourself. <b>You may bruise or bleed more easily than usual.</b></p>	<p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> <li>• Try not to bruise, cut, or burn yourself.</li> <li>• Clean your nose by blowing gently. Do not pick your nose.</li> <li>• Avoid constipation.</li> <li>• Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene.</li> </ul> <p>Some medications such as ASA (e.g. ASPIRIN®) or ibuprofen (e.g. ADVIL®) may increase your risk of bleeding.</p> <ul style="list-style-type: none"> <li>• Do not stop taking any medication that has been prescribed by your doctor (e.g. <b>ASA for your heart</b>).</li> </ul> <p>For minor pain, try acetaminophen (e.g. TYLENOL®) first, but occasional use of ibuprofen may be acceptable.</p>
<p><b>Sore mouth</b> may occur during treatment. Mouth sores can occur on the tongue, the sides of the mouth or in the throat. <b>Mouth sores or bleeding gums can lead to an infection.</b></p>	<ul style="list-style-type: none"> <li>• Brush your teeth gently after eating and at bedtime with a very soft toothbrush. If your gums bleed, use gauze instead of a brush. Use baking soda instead of toothpaste.</li> <li>• Make a mouthwash with ¼ teaspoon baking soda AND ¼ teaspoon salt in 1 cup warm water and rinse several times a day.</li> <li>• Try soft, bland foods like puddings, milkshakes and cream soups.</li> <li>• Avoid spicy, crunchy or acidic food, and very hot or cold foods.</li> <li>• Try ideas <i>in Food Ideas to Try with a Sore Mouth*</i>.</li> </ul>
<p><b>Skin rashes</b> may sometimes occur.</p>	<ul style="list-style-type: none"> <li>• If itching is very irritating, call your healthcare team. Otherwise, be sure to mention it at your next visit.</li> </ul>

SERIOUS SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<p><b>Hand-foot skin reaction</b> commonly occurs during tucatinib and capecitabine treatment. The palms of your hands and soles of your feet may tingle, become red, numb, painful, or swollen. Skin may also become dry or itchy. You may not be able to do your normal daily activities if blisters, severe pain or ulcers occur.</p>	<ul style="list-style-type: none"> <li>• Avoid tight-fitting shoes or rubbing pressure to hands and feet, such as that cause by heavy activity.</li> <li>• Avoid tight-fitting jewellery</li> <li>• Clean hands and feet with lukewarm water and gently pat to dry; avoid hot water.</li> <li>• Apply a sunscreen with an SPF (sun protection factor) of at least 30.</li> <li>• Apply lanolin-containing creams (e.g. BAG BALM®, UDDERLY SMOOTH®) to hands and feet, liberally and often.</li> <li>• <b>Stop taking capecitabine</b> and call your cancer doctor if the skin reaction is painful, as your dose may need to be changed. Taking a lower dose does not affect the usefulness of capecitabine.</li> <li>• <b>Stop taking tucatinib</b> and call your cancer doctor if the skin is peeling or swollen, as your dose may need to be changed.</li> <li>• Tell your healthcare team at your next visit if you have any signs of hand-foot skin reaction as your doses may need to be changed.</li> </ul>
<p>Minor bleeding, such as <b>nosebleeds</b>, may sometimes occur.</p>	<ul style="list-style-type: none"> <li>• Sit up straight and tip your head slightly forward. Tilting your head back may cause blood to run down your throat.</li> <li>• Pinch your nostrils shut between your thumb and forefinger or apply firm pressure against the bleeding nostril for 10 full minutes.</li> <li>• After 10 minutes, check to see if your nose is still bleeding. If it is, hold it for 10 more minutes.</li> <li>• Stay quiet for a few hours and do not blow your nose for at least 12 hours after the bleeding has stopped.</li> <li>• Get emergency help if a nosebleed lasts longer than 20 minutes.</li> </ul>

OTHER SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<p><b>Pain or tenderness</b> may occur where the needle was placed.</p>	<ul style="list-style-type: none"> <li>• Apply cool compresses or soak in cool water for 15-20 mins. several times a day.</li> </ul>

OTHER SIDE EFFECTS DURING TREATMENT	MANAGEMENT
<p><b>Fever, chills, and flu-like illness</b> may rarely occur shortly after treatment with trastuzumab. Fever should last no longer than 24 hours.</p>	<ul style="list-style-type: none"> <li>• Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day.</li> <li>• Fever (over 100°F or 38°C by an oral thermometer) which occurs more than a few days after treatment may be a sign of an infection. Report this to your doctor <b>immediately</b>.</li> </ul>
<p><b>Muscle weakness or joint pain</b> may sometimes occur.</p>	<p>You may take acetaminophen (e.g., TYLENOL®) every 4-6 hours to a maximum of 4 g (4000 mg) per day or ibuprofen (e.g., ADVIL®) for mild to moderate pain. Tell your healthcare team if the pain interferes with your activity.</p>
<p><b>Loss of appetite and weight loss</b> may sometimes occur</p>	<p>Try the ideas in <i>Food Ideas to Help with Decreased Appetite</i>.*</p>
<p><b>Tiredness</b> and lack of energy commonly occur.</p>	<ul style="list-style-type: none"> <li>• Do not drive a car or operate machinery if you are feeling tired.</li> <li>• Try the ideas in <i>Fatigue/Tiredness – Patient Handout</i>.*</li> </ul>
<p>Your <b>skin may sunburn</b> easily.</p>	<p>To help prevent sunburn:</p> <ul style="list-style-type: none"> <li>• Avoid direct sunlight.</li> <li>• Wear a hat, long sleeves and long pants or skirt outside on sunny days.</li> <li>• Apply a sun block lotion with an SPF (sun protection factor) of at least 30.</li> <li>• Refer to <i>Your Medication Sun Sensitivity and Sunscreens</i>* or the BC Health Guide for more information.</li> <li>• After sun exposure, if you have a severe sunburn or skin reaction such as itching, rash, or swelling, contact your doctor.</li> </ul>
<p><b>Numbness or tingling of the fingers or toes</b> may sometimes occur. This will slowly return to normal once your treatments are over. This may take several months.</p>	<p>Be careful when handling items that are sharp, hot, or cold.</p> <ul style="list-style-type: none"> <li>• Be careful when walking on uneven surfaces or doing activities that need you to balance or be steady.</li> <li>• Tell your healthcare team at your next visit if you have trouble with buttons, writing, picking up small objects, walking, or have fallen.</li> </ul>
<p><b>Hair loss</b> is rare with tucatinib and capecitabine and does not occur with trastuzumab. Your hair will grow back once you stop treatment. Colour and texture may change.</p>	<p>If hair loss is a problem, refer to <i>Resources for Hair Loss and Appearance Changes – Patient Handout</i>.*</p>

**\*Please ask your chemotherapy nurse, pharmacist or dietitian for a copy**

**Special note:**

**Heart Problems:** Serious heart problems can occur when starting capecitabine. These can rarely be fatal. Problems such as chest pain, heart attack, abnormal heart rhythm, or heart failure can occur. Having a history of heart problems with fluorouracil, a related chemotherapy drug, is a risk factor, as is having a history of prior angina (heart pain) or heart attack. Seek medical attention promptly if you experience feelings of heavy pressure or pain in the chest, trouble breathing, significant worsening leg swelling, or marked lightheadedness. These symptoms can occur within days after starting capecitabine. If your symptoms are severe, you may need to call for emergency help.

**INSTRUCTIONS FOR THE PATIENT**

- Tell your doctor if you have ever had an unusual or **allergic reaction** to trastuzumab, tucatinib, capecitabine or fluorouracil.
- The **drinking of alcohol** (in small amounts) does not appear to affect the safety or usefulness of trastuzumab, tucatinib, or capecitabine.
- Tucatinib and capecitabine may **damage sperm**. Tucatinib, capecitabine and trastuzumab may harm the baby if used during pregnancy. It is best to use **birth control** while being treated with these drugs, and for at least one week after the last dose. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment and for one week after the last dose.
- Do not donate semen during treatment and for at least one month after the last dose of tucatinib.
- Tell doctors, dentist and other health professionals that you are being treated with trastuzumab, tucatinib, and capecitabine before you receive any treatment from them.

**Tucatinib**

- Tucatinib is taken by mouth twice a day, about 12 hours apart, with equal numbers of tablets taken at each dose. You may be given tablets of more than one strength to make the right dose. Tucatinib can be taken with or without food. It can be taken at the same time as capecitabine on days that you take both medications.
- If you vomit after taking tucatinib, do not take a second dose. Call your health care team during office hours for advice.
- If you miss a dose of tucatinib, skip the missed dose and go back to your usual dosing times. Do not double your dose or take extra tablets to make up for the missed dose.
- Store tucatinib tablets out of the reach of children, at room temperature, and away from heat, light, and moisture. Keep tablets in the original bottle and the lid tightly closed. Do not remove the desiccant. Once the bottle has been opened, any remaining tucatinib tablets must be discarded after 3 months.

**Capecitabine**

- Capecitabine is taken by mouth twice a day, about 10-12 hours apart, with equal numbers of tablets taken at each dose. You may be given tablets of more than one strength to make the right dose. Capecitabine should be taken within 30 minutes following the end of a meal (breakfast and dinner) with a glass of water.
- The tablet contains lactose.
- If you vomit after taking capecitabine, do not take a second dose. Call your health care team during office hours for advice.



- If you miss a dose of capecitabine, take it as soon as you can if it is within 6 hours of the missed dose. If it is over 6 hours since the missed dose, skip the missed dose and go back to the usual dosing time. Let your doctor know during office hours if you have missed a dose.
- Sometimes capecitabine treatment has to be stopped for a short time because of side effects. When you restart capecitabine treatment, do not make up for the missed dose; instead, take as directed by your cancer doctor and finish the treatment on the same day as originally planned. For example, if you stop on day 3 of your 14-day treatment course and then restart at a later day, you would still take the last dose on day 14. You may be told to take a different dose and you may have extra tablets left over. Return the extra tablets to the clinic at your next visit. Taking a lower dose does not affect the usefulness of capecitabine.
- Store capecitabine tablets out of the reach of children; at room temperature; away from heat, light and moisture.

### Medication Interactions

Other drugs may interact with capecitabine, such as phenytoin (DILANTIN®), fosphenytoin (CEREBRYX®) and warfarin (COUMADIN®). Other drugs may interact with tucatinib, such as gemfibrozil and rifampin. Other drugs may interact with trastuzumab such as warfarin (COUMADIN®).

Tell your doctor if you are taking these or any other drugs as you may need extra blood tests or your dose may need to be changed. Check with your doctor or pharmacist before you start taking any new drugs.

### **THE FOLLOWING INFORMATION IS VERY IMPORTANT**

#### **STOP TAKING TUCATINIB AND CAPECITABINE AND SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:**

- Signs of an **infection** such as fever (over 38°C or 100°F by an oral thermometer), shaking chills; severe sore throat, productive cough (coughing up thick or green sputum); cloudy or foul smelling urine; painful, tender, or swollen red skin wounds or sores.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling or breathing problems.
- Signs of **bleeding problems** such as black, tarry stools, blood in urine, pinpoint red spots on skin, extensive bruising.
- Signs of **heart or lung problems** such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty in breathing, swelling of ankles, or fainting.
- Signs of a **stroke** such as sudden onset of severe headache, eyesight changes, slurred speech, loss of coordination, weakness or numbness in arm or leg.
- Signs of a **blood clot** such as tenderness or hardness over a vein, calf swelling and tenderness, sudden onset of cough, chest pain or shortness of breath.
- **Seizures or loss of consciousness** with or without **confusion, headache, or changes in eyesight.**
- **Uncontrolled nausea, vomiting, or diarrhea.**

**SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:**

- **Painful hand-foot skin reaction** such as painful redness, peeling, tingling, numbness, swelling or blistering of the palms of your hands and/or the bottoms of your feet.
- **Diarrhea** with four stools a day more than usually or diarrhea during the night.
- **Nausea** that causes you to eat a lot less than usual or **vomiting** more than 2 times in 24 hours.
- Painful redness, swelling or sores on your lips, tongue, mouth or throat
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Signs of **anemia** such as unusual tiredness or weakness.
- **Severe abdominal or stomach cramping or pain.**
- Signs of **dehydration** such as dark yellow urine or decreased amount of urine; feeling thirsty or having dry mouth even after drinking; headache.

**CHECK WITH YOUR DOCTOR IF ANY OF THE FOLLOWING CONTINUE OR BOTHER YOU:**

- Painless hand-foot skin reaction such as redness, peeling, tingling, numbness, swelling, or blistering of the palms of your hands and/or bottoms of your feet.
- Easy bruising or minor bleeding.
- Heartburn, mild to moderate abdominal or stomach pain.
- Painless redness, swelling, pain, or sores on your lips, tongue, mouth, or throat.
- Redness, swelling, pain or sores where the needle was placed.
- Headache not controlled by acetaminophen.
- Skin rash or itching.
- Changes in fingernails or toenails.
- Numbness or tingling in feet or hands or painful leg cramps.
- Watery eyes, eye irritation or changes in eyesight.

**If you experience symptoms or changes in your body that have not been described above but worry you, or if any symptoms are severe, contact:**

\_\_\_\_\_ at telephone number: \_\_\_\_\_