Trastuzumab and Lapatinib

What is Trastuzumab (tras-TOO-zoo-mab) and how does it work?
Trastuzumab is a type of targeted cancer therapy called a “monoclonal antibody”. Another name for this drug is Herceptin™. Trastuzumab seeks out cancer cells and attaches to the HER2 receptors, to prevent the cells from dividing and making new cancer cells.

What is Lapatinib (la-PA-ti-nib) and how does it work?
Lapatinib is a type of oral, targeted cancer therapy called a “tyrosine kinase inhibitor”. Another name for this drug is Tykerb. It is made in a laboratory. This drug dissolves in your digestive system and gets absorbed into your blood stream. Lapatinib seeks out cancer cells that have HER2 receptors. Once inside these cancer cells, Lapatinib can prevent the cell from dividing and making new cancer cells.

Why am I getting two drugs to treat my cancer?
Both drugs work to stop fast growing cancer cells from dividing and making new cells, but they attack the cancer cells differently. Giving the two drugs together makes the treatment more effective.

What should I tell my doctor before getting this treatment?
Talk to your doctor about the following:

• If you have ever had chemotherapy and the names of the chemotherapy drugs you were given.
• If you have ever had liver or lung problems.
- If you have ever had changes in your heart rhythm or other heart problems.
- If you have low levels of potassium or magnesium.
- If you are pregnant or think you may be pregnant. Your doctor will talk with you about birth control while getting treatment.
- If you are breastfeeding.
- If you are allergic to mice.
- If you have been told that you need to start a new medicine.
- The medicines/pills you are taking, including:
  - Medicines prescribed by any of your doctors
  - Herbs, including St. John’s Wort
  - Vitamins
  - Over-the-counter medicines

**How does my doctor decide my treatment dose?**

To determine your treatment dose, your doctor will review the following: your weight, how well your heart and liver are working, and any other health problems you have.

You will receive a dose of Trastuzumab every three weeks, and you will take Lapatinib by mouth once a day. You will see the doctor or nurse practitioner every three weeks when you are getting this treatment.

**How will my treatment be given?**

Trastuzumab is given directly into your blood stream through a tube (IV) placed in your arm or chest. Trastuzumab comes in a bag with tubing attached. The nurse will connect the tubing to a pump. Your first treatment will take 90 minutes. If you do not have any problems with your first treatment, then your future treatments will last 30 minutes.

**How do I handle, store and dispose of Lapatinib?**

- **There are special safe handling instructions for this medicine.** Talk to your doctor, pharmacist or nurse about the precautions you need to follow when taking this medicine at home.
- Store this medicine in a closed container at room temperature, away from heat, moisture, and direct light. Keep away from children.
- Talk with your pharmacist about how to get rid (dispose) of this medicine safely.
How do I take Lapatinib?

- **Do not** crush, break, or chew the tablets.
- **Do not** eat grapefruit or drink grapefruit juice. This can increase your risk of side effects.
- **Do not** take this medicine with food. Take this medicine 1 hour before or 1 hour after a meal.
- Take your medicine at the same time everyday with a full glass of water. If for some reason you are unable to take a dose as scheduled, you can take it 4 hours before or 4 hours after, the time you normally take the medicine.
- If you miss a dose, wait until it is time for your next dose, and skip the missed dose. **Do not** double up on doses.
- Keep track of what days and times you take Lapatinib by using a calendar or diary.
- **Do not** take more tablets than prescribed for each treatment cycle. This may mean that you have pills left over.
- Your doctor may change your dose in the future to find out what works best for you. Taking a lower dose of Lapatinib does not mean the medicine will not work.

What are the side effects of this treatment?

Every person responds differently to treatment. Some of the more common side effects of this treatment are:

- Flu-like symptoms: chills, fever, headache, body aches and sweating (more common with your first few doses of Trastuzumab)
- Allergic reaction to Trastuzumab (difficulty breathing, hives, or swelling of the face)
- Diarrhea
- Cough
- Rash
- Muscle or joint aches and pain
- Fatigue
- Weakness
• Nausea or vomiting
• Stomach pain, bloating or feeling “full”
• Decreased appetite or taste changes
• Skin changes such as itchy, dry or peeling skin
• Changes in your nails (color changes or swelling around the nails)
• Eye irritation

When should I call my doctor?
You should call your doctor right away if you have any of the following signs or symptoms:
• Fever of 100.4 degrees Fahrenheit (38 degrees Celsius) or higher

A fever can be life threatening if not treated. Your doctor may ask you to go to the hospital.

• Chills, sore throat, cough or a wound that does not get better
• Open sores on your lips, tongue or in your mouth
• Nausea that prevents you from eating or drinking
• Bleeding or bruising, including bloody or black stools or blood in your urine
• Diarrhea (4 or more loose stools in 24 hours) or diarrhea at night
• Any vomiting, even if you only vomit once
• Swelling in feet or ankles
• Fast weight gain
• Shortness of breath or difficulty breathing
• Yellowing of the skin or eyes
• Chest pain, fast or irregular heartbeat

Is there anything else I should know about this treatment?
• Trastuzumab may cause problems with the pumping of your heart. Your doctor may check your heart every several months while you are getting treatment.
• Do not get pregnant or breastfeed while taking this medicine or for 6 months after your last treatment. Tell your doctor right away if you become pregnant.

• Some patients may have an allergic reaction while the Trastuzumab is being given. If an allergic reaction does happen, the nurse will give you medicine to help manage the reaction and extra precautions will be taken when your next treatment is given.

• This treatment may make it harder for your body to fight infections. Wash your hands often and avoid people who are sick.

• Treatment can change how your body reacts to vaccines. Talk to your doctor before getting any vaccines.

• You should drink 8 to 10 eight-ounce glasses of non-caffeinated fluid each day throughout your treatment. It is important to keep you hydrated while you are receiving treatment.

For more information about cancer, chemotherapy, side effects or how to care for yourself during treatment, refer to your Chemotherapy and You book, or ask your doctor, nurse or pharmacist.

You may also find it helpful to watch The James Patient Education videos at http://cancer.osu.edu/patientedvideos to help you learn tips for managing treatment side effects.