

PTP: Pertuzumab, Trastuzumab and Paclitaxel

What is Pertuzumab (per-TOO-zoo-mab) and how does it work?

Pertuzumab is a type of targeted cancer therapy called a “monoclonal antibody”. Another name for this drug is Perjeta™. Pertuzumab seeks out cancer cells and attaches to the HER2 receptors, to prevent the cells from dividing and making new cancer cells.

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. It also fights cancer cells by stimulating your immune system.

What is Paclitaxel (pak-li-TAX-el) and how does it work?

Paclitaxel is a chemotherapy drug known as an “anti-microtubule inhibitor”. Another name for this drug is Taxol™. It is a natural medicine that comes from the bark of Pacific Yew trees. This drug fights cancer by stopping fast growing cancer cells from dividing and making new cancer cells.

Why am I getting three chemotherapy drugs for my cancer?

All three chemotherapy drugs work to stop fast growing cancer cells from dividing and making new cells. Each drug attacks the cancer cells differently. Giving the three drugs together makes the treatment more effective.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

What should I tell my doctor before getting chemotherapy?

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 heart, liver, or lung problems.
- If you are allergic to mice.
- If you are allergic to medicines containing Cremophor® EL.
- If you are pregnant or think you may be pregnant. Your doctor will talk with you about birth control while getting chemotherapy.
- If you are breastfeeding.
- 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
 - ▶ Vitamins
 - ▶ Over-the-counter medicines

How does my doctor decide my chemotherapy dose?

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

You will receive a dose of paclitaxel every week, and a dose of pertuzumab and trastuzumab every three weeks (this is 1 cycle).

Some patients will receive this combination for 4 cycles before surgery. Other patients will continue receiving this treatment as long as you are not experiencing too many side effects and your cancer is not getting worse.

You will normally see the doctor or nurse practitioner every 3 weeks while receiving this chemotherapy treatment.

Should I eat or drink before my treatment?

It is best to eat a small meal before getting your treatment. Drinking plenty of non-caffeinated fluids may also be helpful. However, if you have been told to limit fluids, check with your doctor about how much you can drink.

How will my treatment be given?

Thirty to sixty minutes before your chemotherapy, you will be given several medicines to prevent you from having an allergic reaction. **These medicines may affect your abilities, so for your safety you should have someone drive you home.**

Pertuzumab is given directly into your blood stream through a tube (IV) placed in your arm or chest. Pertuzumab comes in a bag with tubing attached. The nurse will connect the tubing to a pump. Your first treatment takes 60 minutes. If you do not have any problems with your first treatment, then your future treatments will last 30 minutes.

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 takes 90 minutes. If you do not have any problems with your first treatment, then your future treatments will last 30 minutes.

Paclitaxel is given directly into your blood stream through a tube (IV) placed in your arm or chest. Paclitaxel comes in a bag with tubing attached. The nurse will connect the tubing to a pump. This treatment takes 60 minutes.

Your entire visit, including your doctor's appointment and your treatment will take about 3 to 5 hours.

What are the side effects of this treatment?

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

- Diarrhea
- Numbness, tingling or pain in hands and feet
- Swelling of hands, feet or ankles
- Fatigue
- Weakness
- Nausea
- Changes in your nails
- Rash or other skin changes such as dryness or itching
- Hair loss or thinning, including hair on your head and body (this normally beginning 10 to 14 days after chemotherapy)

- Mouth pain or open sores in the mouth
- Low white blood cell count (may increase your risk for infection)
- Low hemoglobin (may cause you to have less energy and tire more easily)
- Low platelet counts (may cause you to bleed more easily or longer than normal and have more bruising)
- Muscle or joint aches and pain
- Flu-like symptoms: chills, fever, headache, body aches and sweating (these are more common with your first few doses of Trastuzumab)
- Treatment related reactions including: difficulty breathing, hives, or swelling of the face
- Cough

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 in your mouth
- Nausea that prevents you from eating or drinking
- Vomiting even after you have taken your anti-nausea medicine
- Bleeding or bruising, including bloody or black stools or blood in your urine
- Diarrhea (4 or more loose stools in 24 hours)
- Changes in your heartbeat
- Shortness of breath or difficulty breathing
- Swelling in feet or ankles
- Muscle or joint aches and pain
- Severe tiredness, weakness or pain
- **Signs of an allergic reaction, including:**
 - ▶ Difficulty breathing, wheezing, chest pain or tightness
 - ▶ Swelling in your face, lips, tongue, or throat.
 - ▶ Rash

Is there anything else I should know about this treatment?

- **Trastuzumab** and **Pertuzumab** may cause problems with the pumping of your heart. Your doctor will check your heart before you start this medicine and every several months while you are getting treatment.
- Some patients have allergic reactions while the **Paclitaxel**, **Pertuzumab** and **Trastuzumab** are being given. To prevent this, you will be given several medicines **before** your treatment. If an allergic reaction does happen during your treatment, the nurse will give you medicine to help manage the reaction and extra precautions will be taken when your next treatment is given.
- Chemotherapy may make it harder for your body to fight infections. Wash your hands often and avoid people who are sick.
- This treatment requires special precautions to prevent the chemotherapy drugs from coming into contact (through blood, urine, bowel movements, vomit and vaginal or seminal fluids) with others. Your chemotherapy nurse will give you guidelines to follow for 48 hours after receiving chemotherapy.
- Chemotherapy 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. This is important to keep you hydrated while you are receiving chemotherapy.
- **Paclitaxel** may cause women to stop having menstrual periods. Depending on your age, your menstrual cycles may or may not return.
- It may be difficult to get pregnant even after the chemotherapy is finished.
- This treatment may affect your ability to have children. Talk to your doctor before getting chemotherapy if you are planning to have children in the future.

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.