

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

Why am I getting 3 treatment medicines for my cancer?

All 3 medicines work to stop fast growing cancer cells from dividing and making new cells. Each medicine attacks the cancer cells differently. Giving the 3 medicines together makes your 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 my treatment?

Talk to your doctor about the following:

- If you have ever had chemotherapy or anti-cancer treatment and the names of the medicines 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 that contain Cremophor EL.
- If you are pregnant or think you may be pregnant. Your doctor will talk with you about birth control when you take these medicines.
- 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 ordered by any of your doctors
 - ▶ Herbs
 - ▶ 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 height, your weight, your medicines, how well your heart and liver work and any other health problems you have.

You will receive a dose of Paclitaxel every week, and a dose of Pertuzumab and Trastuzumab every 3 weeks (this is 1 cycle).

Some patients will receive this combination for 4 cycles before or after surgery. Other patients will continue receiving this treatment as long as they do not have too many side effects and the cancer is not getting worse.

You will normally see your doctor or nurse practitioner every 3 weeks during your treatment.

Should I eat or drink before my treatment?

It is best to eat a small meal and drink plenty of fluids before your treatment begins. If you have been told to limit fluids, check with your doctor about how much you can drink.

How will my treatment be given?

You will be given several medicines 30 to 60 minutes before your treatment to prevent you from having an allergic reaction. If you have an allergic reaction, you may receive medicines to help the symptoms go away. **These medicines may affect your abilities. For your safety, you should speak with your doctor to decide if 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. Your 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 take only 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. Your 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 take only 30 minutes.

If you do not have any problems with your first treatments of pertuzumab and trastuzumab, then your future treatments may be given at the same time.

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. Your 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 treatment are:

- Diarrhea
- Numbness, tingling or pain in your hands and feet
- Swelling of your 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 begins 10 to 14 days after treatment)
- 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 your 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 your feet or ankles
- Fast weight gain
- 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 during 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, your nurse will give you medicine to help manage the reaction and take extra precautions during your next treatment.
- This treatment may make it harder for your body to fight infections. Wash your hands often and stay away from people who are sick.
- This treatment requires special precautions to prevent the chemotherapy medicine from coming into contact (through blood, urine, bowel movements, vomit and vaginal or seminal fluids) with others. Your nurse will give you guidelines to follow for 48 hours after your treatment.
- Cancer treatments can change how your body reacts to vaccines. Talk to your doctor before getting any vaccines.
- It is important to keep hydrated during treatment. Unless told otherwise by your doctor, drink 8 to 10 cups of non-caffeinated fluid each day.
- **Paclitaxel** may cause women to stop having menstrual periods. Depending on your age, your menstrual cycles may or may not return.
- This treatment may affect your ability to have children. It may be hard to get pregnant even after your treatment has ended. Talk to your doctor before you start treatment if you are planning to have children in the future.
- **Do not get pregnant or breastfeed** while taking this medicine or for 7 months after your last treatment. Tell your doctor right away if you become pregnant.

For more information about cancer, cancer treatments, side effects or how to care for yourself during treatment, 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.