Pertuzumab, Trastuzumab, and Hyaluronidase-zzxf (Phesgo™)

**Pronounced:** per-TU-zoo-mab, tras-TU-zoo-mab, and hye-al-yoor-i-bose

**Classification:** Pertuzumab and Trastuzumab: Monoclonal Antibodies. Hyaluronidase-zzxf: Endoglycoside.

**About Pertuzumab, Trastuzumab, and Hyaluronidase-zzxf (Phesgo™)**

Pertuzumab and trastuzumab are monoclonal antibodies. Monoclonal antibodies are created in a lab to attach to the targets found on specific types of cancer cells. The antibody “calls” the immune system to attack the cell it is attached to, resulting in the immune system killing the cell. These antibodies can work in different ways, including stimulating the immune system to kill the cell, blocking cell growth or other functions necessary for cell growth.

Pertuzumab and trastuzumab target HER2 positive cancer cells. HER2 receptors on cells send signals telling the cell to grow and divide. Cancers that overexpress HER2 have too many receptors, which cause the cells to grow and divide more quickly. By inhibiting HER2, signals are sent to these cells to slow their growth.

Hyaluronidase is an endoglycoside that helps with the absorption of pertuzumab and trastuzumab.

**How To Take Pertuzumab, Trastuzumab, and Hyaluronidase-zzxf**

This medication is given as a subcutaneous injection (shot) in the thigh. It is given over several minutes. The dose of each medication and how often you receive them will be decided by your care team. Often it is given every 3 weeks and may be given with other chemotherapies. Because this medication is indicated only for the treatment of HER2 positive cancer, a sample of your tumor will be tested in a lab to determine if it is HER2 positive prior to starting treatment.

In some cases, a person may have an allergic reaction to this medication. You will be closely monitored during and after the injection. It is also common to have redness and pain and the injection site. If you start to feel dizzy, nauseous, chills, fever, vomiting, diarrhea, itchy, have trouble breathing, or have chest pain, let your provider know right away.

**Possible Side Effects of Pertuzumab, Trastuzumab, and Hyaluronidase-zzxf**

There are a number of things you can do to manage the side effects of pertuzumab, trastuzumab, and hyaluronidase-zzxf. Talk to your care team about these recommendations. They can help you decide what will work best for you. These are some of the most common or important side effects:

**Heart Problems**

This drug can cause heart problems, or worsen pre-existing heart problems, including congestive heart failure. Your heart function may be tested using an echocardiogram or MUGA scan prior to starting treatment, and every few months while on treatment and after completion of treatment. Heart issues may worsen when this medication is given with anthracyclines or if anthracyclines are given after treatment with this medication is done. Notify your healthcare provider if you have sudden weight gain or swelling in the ankles or legs. If you develop chest pain or pressure, pain in the left arm, back, or jaw, sweating, shortness of breath, clammy skin, nausea, dizziness, or lightheadedness, call 911 or go to the nearest emergency room.

**Lung Problems**

This medication can cause issues with your lungs, including swelling, fluid, and/or scarring within the lungs. If you start to have any new or worsening shortness of breath, trouble breathing, cough, or fever call your provider right away.

**Administration-Related Reactions**
Some patients may experience chills, fever, dizziness, nausea, rash, flushing, vomiting, and diarrhea. More commonly, the injection site may become reddened or painful. Medications such as acetaminophen and/or diphenhydramine may be given to lessen the reactions.

More serious reactions can occur but are rare. Symptoms of a serious reaction include shortness of breath, wheezing, low blood pressure, and an increase in heart rate. Your provider will determine whether or not it is safe to continue treatment. Notify your nurse right away if you develop any concerning symptoms.

**Diarrhea**

Your oncology care team can recommend medications to relieve diarrhea. Also, try eating low-fiber, bland foods, such as white rice and boiled or baked chicken. Avoid raw fruits, vegetables, whole grain breads, cereals, and seeds. Soluble fiber is found in some foods and absorbs fluid, which can help relieve diarrhea. Foods high in soluble fiber include: applesauce, bananas (ripe), canned fruit, orange sections, boiled potatoes, white rice, products made with white flour, oatmeal, cream of rice, cream of wheat, and farina. Drink 8-10 glasses of non-alcoholic, un-caffeinated fluid a day to prevent dehydration.

**Nausea and/or Vomiting**

Talk to your oncology care team so they can prescribe medications to help you manage nausea and vomiting. In addition, dietary changes may help. Avoid things that may worsen the symptoms, such as heavy or greasy/fatty, spicy or acidic foods (lemons, tomatoes, oranges). Try saltines, or ginger ale to lessen symptoms.

Call your oncology care team if you are unable to keep fluids down for more than 12 hours or if you feel lightheaded or dizzy at any time.

**Fatigue**

Fatigue is very common during cancer treatment and is an overwhelming feeling of exhaustion that is not usually relieved by rest. While on cancer treatment, and for a period after, you may need to adjust your schedule to manage fatigue. Plan times to rest during the day and conserve energy for more important activities. Exercise can help combat fatigue; a simple daily walk with a friend can help. Talk to your healthcare team for helpful tips on dealing with this side effect.

**Muscle or Joint Pain/Aches**

Your healthcare provider can recommend medications and other strategies to help relieve pain.

**Low White Blood Cell Count (Leukopenia or Neutropenia)**

White blood cells (WBC) are important for fighting infection. While receiving treatment, your WBC count can drop, putting you at a higher risk of getting an infection. You should let your doctor or nurse know right away if you have a fever (temperature greater than 100.4°F or 38°C), sore throat or cold, shortness of breath, cough, burning with urination, or a sore that doesn't heal.

Tips to preventing infection:

- Washing hands, both yours and your visitors, is the best way to prevent the spread of infection.
- Avoid large crowds and people who are sick (i.e.: those who have a cold, fever or cough or live with someone with these symptoms).
- When working in your yard, wear protective clothing including long pants and gloves.
- Do not handle pet waste.
- Keep all cuts or scratches clean.
- Shower or bath daily and perform frequent mouth care.
- Do not cut cuticles or ingrown nails. You may wear nail polish, but not fake nails.
- Ask your oncology care team before scheduling dental appointments or procedures.
- Ask your oncology care team before you, or someone you live with, has any vaccinations.

**Reproductive Concerns**

Exposure of an unborn child to this medication could cause birth defects, so you should not become pregnant while on this medication. Effective birth control is necessary during treatment and for at least 7 months after treatment. Even if your menstrual
cycle stops, you could still be fertile and conceive. If you become pregnant during treatment or within the 7 months after your last dose you should contact your provider right away. The company that makes this drug has a pregnancy pharmacovigilance program and should be contacted by either you or your provider if you become pregnant. You should consult with your healthcare team before breastfeeding while receiving this medication.