Paclitaxel, Protein Bound (Abraxane®)

Pronounced: pak-ih-TAX-uhl

Classification: Antimicrotubule Agent, Taxane

About Paclitaxel, Protein Bound (Abraxane®)

Paclitaxel, protein bound, is a form of paclitaxel chemotherapy where the paclitaxel particles are bound in a protein called albumin, which is derived from human blood. This prevents the reactions associated with the preservative used in regular paclitaxel and allows higher doses to be given. Paclitaxel is a plant alkaloid that was developed from the bark of the Pacific Yew tree. Paclitaxel works by disrupting the microtubular network essential for cell division and other normal cellular functions, eventually causing cell death.

How to Take Paclitaxel, Protein Bound

Protein bound paclitaxel is given by intravenous (IV, into a vein) infusion. The dose (dependent on your body size) and how often you receive this medication will be determined by your healthcare provider.

Even when carefully and correctly administered by trained personnel, this drug may cause a feeling of burning and pain. There is a risk that this drug may leak out of the vein at the injection site, resulting in tissue damage. If the area of injection becomes red, swollen, or painful at any time during or after the injection, notify your doctor or nurse immediately. Do not apply anything to the site unless instructed by your doctor or nurse.

Possible Side Effects of Paclitaxel, Protein Bound

There are a number of things you can do to manage the side effects of paclitaxel, protein bound. Talk to your doctor or nurse about these recommendations. They can help you decide what will work best for you. These are some of the most common side effects:

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

This medication can cause life threatening infections, with or without a decrease in white blood cell counts.

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 for 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 doctor or nurse before scheduling dental appointments or procedures.
• Ask your doctor or nurse before you, or someone you live with has any vaccinations.

**Loss or Thinning of Scalp and Body Hair (Alopecia)**
Your hair may become thin, brittle, or may fall out. This typically begins two to three weeks after treatment starts. This hair loss can be all body hair, including pubic, underarm, legs/arms, eyelashes, and nose hairs. The use of scarves, wigs, hats and hairpieces may help. Hair generally starts to regrow soon after treatment is completed. Remember your hair helps keep you warm in cold weather, so a hat is particularly important in cold weather or to protect you from the sun.

**Peripheral Neuropathy (Numbness or Tingling in the Hands and/or Feet)**
Peripheral neuropathy is a toxicity that affects the nerves. It causes a numbness or tingling feeling in the hands and feet, often in the pattern of a stocking or glove. This can get progressively worse with additional doses of the medication. In some people, the symptoms slowly resolve after the medication is stopped, but for some it never goes away completely. You should let your healthcare provider know if you experience numbness or tingling in the hands and feet, as they may need to adjust the doses of your medication.

**Heart Problems**
This medication can cause slow or abnormal heartbeats, congestive heart failure, or heart dysfunction, including abnormal ECG readings. Notify your healthcare provider right away if you feel abnormal heartbeats, if you feel dizzy or faint, or if you develop swelling in your feet or ankles.

**Muscle or Joint Pain/Aches and Headache**
Your doctor or nurse can recommend medication and other strategies to relieve pain.

**Liver Toxicity**
This medication can cause liver toxicity, which your doctor may monitor for using blood tests called liver function tests. If you develop elevations in your liver function tests, your healthcare provider may need to lower your dose or stop the medication. Notify your healthcare provider if you notice yellowing of the skin or eyes, your urine appears dark or brown or pain in your abdomen, as these can be signs of liver toxicity.

**Low Red Blood Cell Count (Anemia)**
Your red blood cells are responsible for carrying oxygen to the tissues in your body. When the red cell count is low, you may feel tired or weak. You should let your doctor or nurse know if you experience any shortness of breath, difficulty breathing or pain in your chest. If the count gets too low, you may receive a blood transfusion.

**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.

**Nausea and/or Vomiting**
Talk to your doctor or nurse 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 antacids, (e.g. milk of magnesia, calcium tablets such as Tums), saltines, or ginger ale to lessen symptoms.

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

**Diarrhea**
Your oncology 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.

**Less common, but important side effects can include:**

- **Lung problems:** This drug can cause a variety of lung problems, including pneumonitis, interstitial pneumonia, pulmonary embolism, and lung fibrosis. Call your healthcare provider right away if you have shortness of breath, cough, wheezing or difficulty breathing.

- **Allergic Reactions:** In some cases, patients can have an allergic reaction to this medication. Signs of a reaction can include: shortness of breath or difficulty breathing, chest pain, rash, flushing or itching or a decrease in blood pressure. If you notice any changes in how you feel during the infusion, let your nurse know immediately. The infusion will be slowed or stopped if this occurs. Depending on the severity of your reaction, you may still be able to receive the medication with a pre-medication to prevent a reaction, or if the medication is given at a slower rate.

- **Low Platelet Count (Thrombocytopenia):** Platelets help your blood clot, so when the count is low you are at a higher risk of bleeding. Let your doctor or nurse know if you have any excess bruising or bleeding, including nose bleeds, bleeding gums or blood in your urine or stool. If the platelet count becomes too low, you may receive a transfusion of platelets.
  - Do not use a razor (an electric razor is fine).
  - Avoid contact sports and activities that can result in injury or bleeding.
  - Do not take aspirin (salicylic acid), and non-steroidal anti-inflammatory medications (NSAIDs) such as Motrin®, Aleve®, Advil®, etc. as these can all increase the risk of bleeding. Unless your healthcare team tells you otherwise, you may take acetaminophen (Tylenol).
  - Do not floss or use toothpicks and use a soft-bristle toothbrush to brush your teeth.

**Reproductive concerns**

Exposure of an unborn child to this medication could cause birth defects, so you should not become pregnant or father a child while on this medication. For women, effective birth control is necessary during treatment and for 6 months after the last dose. For men, effective birth control is necessary during treatment and for 3 months after the last dose. Even if your menstrual cycle stops or you believe you are not producing sperm, you could still be fertile and conceive. You should not breastfeed while receiving this medication and for 2 weeks after the last dose.