

## **Melphalan (Alkeran®, L-PAM)**

**Pronounced:** MEL-fa-lan

**Classification:** Alkylating Agent

### **About Melphalan**

Melphalan exerts its anti-cancer effect by a process called alkylation. Alkylation damages the DNA of cells, which prevents them from dividing, and causes them to die. Since cancer cells, in general, divide faster and with less error correcting than healthy cells, cancer cells are more sensitive to this damage. In this way, Melphalan slows or stops the growth of cancer cells in your body.

### **How to Take Melphalan**

Melphalan is given by intravenous (into a vein) infusion. It can also be taken orally (by mouth) in the form of a tablet on an empty stomach (1 hour before or 2 hours after a meal). The dosage and schedule is determined by the person's size and type of cancer.

Even when carefully and correctly administered by trained personnel, this drug may cause feeling of burning and pain in the vein it is given through. There is a risk that this drug may leak out of the vein at the injection site, resulting in tissue damage that can be severe. If the area of injection becomes red, swollen, or painful at anytime 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 Melphalan**

There are a number of things you can do to manage the side effects of Melphalan. 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:

#### **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), 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 doctor or nurse before scheduling dental appointments or procedures.
- Ask your doctor or nurse before you, or someone you live with, has any vaccinations.

For more suggestions, read the [Neutropenia Tip Sheet](#).

### **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. Read the [anemia tip sheet](#) for more information.

### **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 nosebleeds, bleeding gums or blood in your urine or stool. If your 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), 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.

Read the [thrombocytopenia tip sheet](#) for more information.

### **Nausea and/or Vomiting**

Take anti-nausea medications as prescribed. If you continue to have nausea or vomiting, notify your doctor or nurse so they can help you manage this side effect. 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. Read [the Nausea & Vomiting Tip Sheet](#) for more suggestions.

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.

## **Mouth Ulcers (Sores)**

Certain cancer treatments can cause sores or soreness in your mouth and/or throat. Notify your doctor or nurse if your mouth, tongue, inside of your cheek or throat becomes white, ulcerated or painful. Performing [regular mouth care](#) can help prevent or manage mouth sores. If mouth sores become painful, your doctor or nurse can recommend a pain reliever.

- Brush with a soft-bristle toothbrush or cotton swab twice a day.
- Avoid mouthwashes that contain alcohol. A baking soda and/or salt warm water mouth rinse (2 level teaspoons of baking soda or 1 level teaspoon salt in an eight ounce glass of warm water) is recommended 4 times daily.
- If your mouth becomes dry, eat moist foods, drink plenty of fluids (6-8 glasses), and suck on sugarless hard candy.
- Avoid smoking and chewing tobacco, drinking alcoholic beverages and citrus juices.

Read the [mouth ulcer tip sheet](#) for more information.

## **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 that absorb fluid and can help relieve diarrhea. Foods high in soluble fiber include: applesauce, bananas (ripe), canned fruit, orange and grapefruit sections, boiled potatoes, white rice and 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. Read [Low Fiber Diet for Diarrhea](#) for more tips.

## **Sexual and Reproductive Changes**

This drug can affect your reproductive system, resulting in the menstrual cycle or sperm production becoming irregular or stopping permanently. Women may experience menopausal effects including hot flashes and vaginal dryness - read more about [coping with vaginal dryness](#). In addition, the desire for sex may decrease during treatment.

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. Effective birth control is necessary during treatment, even if your menstrual cycle stops or you believe your sperm is affected. You may want to consider sperm banking or egg harvesting if you may wish to have a child in the future. Discuss these options with your oncology team. See [OncoLink's section on sexuality](#) for helpful tips for dealing with these side effects.

## **Other Side Effects**

Some less common side effects include: allergic reaction (rash, itching, hives, shortness of breath), loss or thinning of scalp and body hair ([alopecia](#)), blistering rash

on the skin. Melphalan can affect lung function; if you have any difficulty breathing, shortness of breath or cough, notify your physician.

## **Prednisone (Sterapred®, Prednisone Intensol™)**

**Pronounced:** PRED-nih-sone

**Classification:** Glucocorticoid

### **About Prednisone**

Prednisone is a corticosteroid, similar to a hormone that is made naturally in your body. Corticosteroids (sometimes abbreviated as "steroids") are used to decrease inflammation, (swelling and/or redness) and thus are involved in the management of a number of diseases, including asthma, autoimmune disorders, reactions to medications, and gastrointestinal disorders (colitis), among others. Prednisone may be given to prevent a reaction to a medication, prevent or decrease nausea or be used in high doses to treat certain cancers.

### **How to Take Prednisone**

Prednisone comes as a tablet to take by mouth. Prednisone is best taken with food, as it can irritate your stomach. Your doctor will probably tell you to take your dose(s) of prednisone at certain time(s) of day every day. Your personal dosing schedule will depend on what the medication is being used for.

### **Possible Side Effects of Prednisone**

There are a number of things you can do to manage the side effects of Prednisone. 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:

#### **Increase in Appetite**

Prednisone can cause people to be more hungry or thirsty than usual. Drink plenty of fluids and try to make your snacks healthy ones, since there may be quite a few of them!

#### **Increase in Energy**

Prednisone can give people an increase in energy. They may also develop [insomnia](#), or difficulty sleeping. Taking the medication in the morning may help to prevent this.

#### **Irritability or Change in Mood**

Some patients report feeling irritable or noticing a change in their mood. If this becomes difficult to handle or if the patient expresses a desire to hurt himself, notify a healthcare provider right away.

## **Swelling**

Patients may notice swelling in their hands and/or feet. Elevating the feet may help to lessen swelling in the feet and ankles. Avoid restrictive or tight clothing that may make it harder for the fluid to drain from the hands, feet, and ankles.

## **Nausea and Heartburn**

Taking prednisone with food or milk is generally enough to prevent nausea and heartburn. If possible, take the medication when you can be upright (not lying down) for a few hours after the dose. Avoid things that worsen the symptoms, and try antacids (milk of magnesia and calcium tablets, like Tums), saltines, or ginger ale to lessen symptoms.

## **Increased Blood Sugar**

Prednisone can increase your blood sugar. Diabetics should monitor their blood sugar closely and may require higher doses of insulin while taking prednisone.

## **Weakening of the Bones (Osteoporosis)**

Long-term use can lead to early osteoporosis. Your doctor may have you get a bone density scan (dexa scan) to assess your bone health if you are on long-term therapy.

## **Other Side Effects**

Prednisone can cause delayed wound healing, headaches, muscle weakness, and cataracts (after long-term use).

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