



Provincial Health Services Authority

For the Patient: Procarbazine
Other names: MATULANE®

- **Procarbazine** (proe kar' ba zeen) is a drug that is used to treat many types of cancer. It is a capsule that you take by mouth.
- Tell your doctor if you have ever had an unusual or **allergic reaction** to procarbazine before taking procarbazine.
- A **blood test** may be taken before each treatment. The dose and timing of your chemotherapy may be changed based on the test results and/or other side effects.
- It is important to **take** procarbazine exactly as directed by your doctor. Make sure you understand the directions. Procarbazine may be taken with food or on an empty stomach with a glass of water or juice. Take the daily dose all at once at bedtime unless you are told otherwise by your doctor.
- If you **miss a dose** of procarbazine, call your doctor during office hours to ask about making up the missed dose.
- If you **vomit** the dose of procarbazine within 1 hour of taking it, do not take a second dose. Call your doctor during office hours for advice. You will be told whether you need to take another dose.
- Other drugs such as cough and cold products, certain antidepressants, and allergy and weight reducing remedies may **interact** with procarbazine. Tell your doctor if you are taking these or any other drugs as your dose may need to be changed. Check with your doctor or pharmacist before you start or stop taking any other drugs.
- **Avoid drinking alcohol** while taking procarbazine. You may experience flushing, headache, nausea and vomiting, and/or dizziness if you drink alcohol while taking procarbazine. You may also experience a rise in blood pressure with certain alcoholic beverages such as red wines, vermouth, and tap/draft beer. Use caution with non-alcoholic beverages.
- **Do not smoke** while taking procarbazine as procarbazine may increase the risk of developing lung cancer in people who smoke.
- **Avoid certain foods** which contain tyramine as they may interact with procarbazine. These foods may cause headache, flushing, fast or uneven heartbeat, nausea and vomiting, or a significant rise in blood pressure. Eat only **fresh** foods, especially if they have meat, fish, or poultry in them. Avoid foods that are aged, spoiled, fermented, or pickled. For further information, talk to your **dietitian**.

- Avoid the following products in these food categories while taking procarbazine:
 - **Milk products:** Any outdated or non-pasteurized dairy products, all cheeses other than cream cheese, cottage cheese, or ricotta cheese.
 - **Grains:** any containing cheese
 - **Meat, fish, poultry:** dry fermented sausages (e.g., salami, pepperoni), smoked or pickled fish, non-fresh meat and poultry, any leftover food containing meat, fish, or poultry
 - **Fruits and vegetables:** any overripe, spoiled or fermented fruit or vegetable, fava or broad beans, overripe avocado, sauerkraut
 - **Soups:** any containing meat extracts or cheese
 - **Fats and oils:** gravies and sauces containing meat extracts
 - **Other:** tofu and soy products, protein dietary supplements, meat extracts (e.g., BOVRIL®, OXO®, MARMITE®), yeast extracts (e.g., MARMITE®, VEGEMITE®, brewers yeast)
- Follow the drug, alcohol, and food warnings for **a further week** after you stop taking procarbazine.
- Procarbazine may cause **sterility** in men and **menopause** in women. If you plan to have children, discuss this with your doctor before being treated with procarbazine.
- Procarbazine may damage sperm and may harm the baby if used during pregnancy. It is best to use **birth control** while being treated with procarbazine. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- **Store** procarbazine capsules out of the reach of children, at room temperature, away from heat, light, and moisture.
- **Tell** doctors, dentists, and other health professionals that you are being treated with procarbazine before you receive any treatment from them.

Side effects are listed in the following table in the order in which they may occur. Tips to help manage the side effects are included.

SIDE EFFECTS	MANAGEMENT
<p>Nausea and vomiting may occur after your treatment and may last for 24 hours. This usually improves within a few days as your body adjusts to procarbazine.</p>	<p>You will be given a prescription for antinausea drug(s) to take before your chemotherapy treatment and/or at home. It is easier to prevent nausea than treat it once it has occurred, so follow directions closely.</p> <ul style="list-style-type: none"> • Drink plenty of fluids. • Eat and drink often in small amounts. • Try the ideas in Practical Tips to Manage Nausea.*

SIDE EFFECTS	MANAGEMENT
<p>Your white blood cells may decrease 2-4 weeks after your treatment. They usually return to normal 4-6 weeks after your last treatment. White blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, you are at greater risk of having an infection.</p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> • Wash your hands often and always after using the bathroom. • Avoid crowds and people who are sick. • Stop taking procarbazine and call your doctor immediately at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, or burning when you pass urine.
<p>Your platelets may decrease 2-4 weeks after your treatment. They usually return to normal 4-6 weeks after your last treatment. Platelets help to make your blood clot when you hurt yourself. You may bruise or bleed more easily than usual.</p>	<p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> • Try not to bruise, cut, or burn yourself. • Clean your nose by blowing gently. Do not pick your nose. • Avoid constipation. • Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene. <p>Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.</p> <ul style="list-style-type: none"> • Do not stop taking any medication that has been prescribed by your doctor (e.g., ASA for your heart). • For minor pain, try acetaminophen (e.g., TYLENOL®) first, to a maximum of 4 g (4000 mg) per day, but occasional use of ibuprofen may be acceptable.
<p>Skin rashes may sometimes occur.</p>	<p>Call your doctor.</p>
<p>Your skin may darken in some areas such as your hands, elbows, and knees.</p>	<p>This will slowly return to normal once you stop treatment with procarbazine.</p>
<p>Your skin may sunburn more easily than usual.</p>	<p>Refer to <i>Your Medication Sun Sensitivity and Sunscreens*</i> or the <i>BC Health Guide</i> for more information.</p> <ul style="list-style-type: none"> • After sun exposure, if you have a severe sunburn or skin reaction such as itching, rash, or swelling, contact your doctor.

Hair loss is rare with procarbazine. If you lose hair, it will grow back once you stop treatment with procarbazine. Colour and texture may change.

If hair loss is a problem, refer to [Resources for Hair Loss and Appearance Changes – Patient Handout](#).*

***Please ask your chemotherapy nurse or pharmacist for a copy.**

STOP TAKING PROCARBAZINE AND SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of **serious high blood pressure** such as severe chest pain, enlarged pupils, fast or slow heartbeat, severe headache, eyes sensitive to light, increased sweating, clammy skin, or stiff and sore neck.
- Signs of an **infection** such as fever (over 100°F or 38°C by an oral thermometer), shaking chills; severe sore throat, productive cough (coughing up thick or green sputum); cloudy or foul smelling urine; painful, tender, or swollen red skin wounds or sores.
- Signs of **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin; extensive bruising.
- Signs of a **blood clot** such as tenderness or hardness over a vein, calf swelling and tenderness, sudden onset of cough, chest pain, or shortness of breath.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling, or breathing problems.
- Signs of **heart problems** such as fast or uneven heartbeat, chest pain, or chest pressure.
- **Seizures** or **loss of consciousness**.
- Repeated **vomiting** and cannot keep fluids or medications down.

SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- **Skin rash** or **itching**.
- **Changes in eyesight**.
- **Hearing problems**.
- **Dizziness, confusion, or trouble walking**.
- Signs of **bladder problems** such as changes in urination, painful burning sensation, presence of blood, or abdominal pain.
- Chronic **cough** or **shortness of breath**.
- Increased **sore throat or mouth** that makes it difficult to swallow comfortably.

