Nivolumab (nye vol’ ue mab) is a drug that is used to treat some types of cancer. It is a monoclonal antibody, a type of protein designed to help your own body’s immune system target cancer cells to stop them from growing. It is a clear liquid that is injected into a vein.

Tell your doctor if you have ever had an unusual or allergic reaction to nivolumab before receiving nivolumab.

A blood test may be taken before each treatment. The dose and timing of your treatment may be changed based on the test results and/or other side effects.

Other drugs may interact with nivolumab. Check with your doctor or pharmacist before you start or stop taking any other drugs.

The drinking of alcohol (in small amounts) does not appear to affect the safety or usefulness of nivolumab.

Nivolumab may damage sperm and may harm the baby if used during pregnancy. It is best to use birth control while being treated with nivolumab and for at least 5 months after the last dose. Tell your doctor right away if you or your partner becomes pregnant. Do not breastfeed during treatment.

Tell doctors, dentists, and other health professionals that you are being treated with nivolumab before you receive any treatment from them.

Side effects are listed in the following table in the order in which they may occur. Your treatment is a type of therapy known as immunotherapy and it may cause serious side effects related to your immune system. It is important to report side effects immediately to your doctor. Do not manage side effects at home without speaking with your doctor. Symptoms may be delayed and can develop months after your last dose. Refer to specific protocol handout (if available) for more details.

<table>
<thead>
<tr>
<th>SIDE EFFECTS</th>
<th>MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic reactions may rarely occur. Signs of an allergic reaction may include flushing, rash, itching, dizziness, swelling or breathing problems. This can occur immediately or several hours after receiving nivolumab.</td>
<td>Tell your nurse if this happens while you are receiving nivolumab or contact your oncologist immediately if this happens after you leave the clinic.</td>
</tr>
<tr>
<td><strong>SIDE EFFECTS</strong></td>
<td><strong>MANAGEMENT</strong></td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td><strong>Pain</strong> or <strong>tenderness</strong> may occur where the needle was placed.</td>
<td>Apply cool compresses or soak in cool water for 15-20 minutes several times a day.</td>
</tr>
</tbody>
</table>
| **Your white blood cells** may decrease after your 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**. | To help prevent infection:  
  - Wash your hands often and always after using the bathroom.  
  - Avoid crowds and people who are sick.  
  - 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. |
| Normal platelets help your blood to clot normally after an injury (e.g., cut). **When the platelet count is low, you may be more likely to bruise or bleed.** | To help prevent bleeding problems:  
  - 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.  
Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.  
  - 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, but occasional use of ibuprofen may be acceptable. |
| **Diarrhea** may sometimes occur. | See your doctor or get emergency help. |
| **Nausea** and **vomiting** may occur after your treatment. Most people have little or no nausea. | See or call your doctor as soon as possible. |
| **Skin rashes** may sometimes occur. | |
| **Constipation** may sometimes occur. | |
| **Sugar control** may rarely be affected in diabetic patients. | |
| **Loss of appetite** and **weight loss** sometimes occur. | |
| **Tiredness** and lack of energy commonly occur. | |
SIDE EFFECTS | MANAGEMENT
--- | ---
Hair loss is rare with nivolumab. | If hair loss is a problem, refer to Resources for Hair Loss and Appearance Changes – Patient Handout.*
Numbness or tingling of the fingers or toes rarely occur. | • Be careful when handling items that are sharp, hot, or cold.  
• Tell your doctor at your next visit, especially if you have trouble with buttons, writing, or picking up small objects.
*Please ask your chemotherapy nurse or pharmacist for a copy.

SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:
• Signs of an allergic reaction (rare) soon after a treatment including dizziness, fast heart beat, face swelling, or breathing problems.
• 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.
• Changes in bowel habits, diarrhea, black, tarry stools; blood or mucous in the stool; severe abdominal pain.
• Signs of lung problems such as new or worsening cough, chest pain, coughing blood, shortness of breath, or difficulty in breathing.
• Signs of kidney problems such as lower back or side pain, blood in the urine, swelling of feet or lower legs, or change in amount or colour of urine.
• Signs of blood sugar problems such as thirst and frequent need to pass urine.

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.
• Signs of thyroid problems such as unusual weight gain or loss, feeling hot or cold, deepened voice, or unusual tiredness or weakness.
• Changes in eyesight, eye pain or redness.

CHECK WITH YOUR DOCTOR IF ANY OF THE FOLLOWING CONTINUE OR BOTHER YOU:
• Headache not controlled with acetaminophen (e.g., TYLENOL®).
• Skin rash or itching.
• Irritability or forgetfulness or decreased sex drive.
• Changes in skin colour (lightening).

REPORT ADDITIONAL PROBLEMS TO YOUR DOCTOR