For the Patient: UMYDARBD

Other Names: Treatment of Multiple Myeloma Using Daratumumab (DARZALEX®), Bortezomib (VELCADE®) and Dexamethasone

MY = MYeloma (tumour group)  
DAR = DARatumumab  
B = Bortezomib  
D = Dexamethasone

Uses:
- UMYDARBD is a drug treatment given for Multiple Myeloma.
- UMYDARBD is currently offered to patients with myeloma that has progressed despite at least one prior treatment.

How does it work?
- UMYDARBD is a combination of three drugs, daratumumab (dar-a- toom-ue-mab), bortezomib (bor-TEZ- oh- mib) and dexamethasone (dex- a-METH-a- sone).
- Daratumumab is a monoclonal antibody, a type of protein designed to target and interfere with the growth of cancer cells.
- Bortezomib is a drug that inhibits certain enzymes that play an important role in cell function and growth.
- Dexamethasone is a steroid that helps kill myeloma cells.

Intended Benefits:
- UMYDARBD may stop or slow down the growth of myeloma cells in your body. This may improve your symptoms and delay or prevent new symptoms from developing.
- It will take between several weeks or months of treatment before your doctor can judge if the treatment is working.

Treatment Plan:
- It is a combination of three drugs (daratumumab, bortezomib and dexamethasone). Daratumumab is a clear liquid that is injected into a vein. Bortezomib is injected beneath the skin. Dexamethasone is taken by mouth.
- Your treatment consists of cycles, each cycle is 28 days (day 1-28).
  - For cycles 1 - 2, you will receive daratumumab, bortezomib and dexamethasone treatment every week (days 1, 8, 15, 22)
  - For cycles 3 - 4, you will receive daratumumab every 2 weeks (days 1 and 15) and bortezomib and dexamethasone every week (days 1, 8, 15, 22)
  - For cycles 5-8, you will receive daratumumab every 4 weeks (day 1 only) and bortezomib and dexamethasone every week (days 1, 8, 15, 22)
  - For cycle 9 onwards, you will receive daratumumab and dexamethasone every 4 weeks (day 1 only)
There are two options for administering the very first daratumumab infusion (the option will be determined by your physician based upon the capabilities of the chemotherapy daycare unit):

- Option 1: Infuse daratumumab over 1 day
  - You will be in the treatment room for approximately 9 hours on the first day (day 1). Premedications are given 1 hour before the daratumumab infusion and the infusion will take approximately 7 hours.

- Option 2: Infuse daratumumab over 2 days
  - You will be in the treatment room for approximately 6 hours on each day. Premedications are given 1 hour before the daratumumab infusion and the infusion will take approximately 4.5 hours.

Each cycle thereafter will take approximately 5.5 hours including premedication and observation post infusion.

Daratumumab

- May cause infusion reactions. Medications are given prior to the infusion to prevent reaction. Please fill the prescription for montelukast and also buy acetaminophen 325 mg and diphenhydramine 25 mg tablets. Pick up your dexamethasone from BC Cancer pharmacy the day before or at least one hour before your appointment as you will need to take these medications one hour before the daratumumab infusion.

  During the daratumumab infusion, the nurse will monitor your heart rate, breathing and blood pressure. You will need to remain in the room for observation for 30 minutes after each infusion.

Dexamethasone

- Usually given as 4 mg tablets (4 mg of dexamethasone per tablet)
- Can be given in different dosing regimens as prescribed by your doctor
- The number of tablets you take will depend on the dose that your doctor prescribes for you. On the day of your daratumumab infusion, take 20 mg one hour before the infusion. If your weekly dexamethasone dose is:
  - 40 mg: Take 20 mg one hour before each daratumumab infusion and 20 mg the next day
  - less than 40 mg but greater than 20 mg: Take 20 mg one hour before the daratumumab infusion and the remaining dexamethasone the next day
  - less than 20 mg: take it one hour before the daratumumab infusion (nurse will top up your dose to 20 mg) and 8 mg the next day.

- On the weeks when you are not receiving daratumumab, take your dexamethasone tablets as a single dose with food in the morning.
- For cycle 1:
  - if you are receiving daratumumab over 2 days, take dexamethasone one hour before the infusions on both days
  - if you are receiving daratumumab over 1 day, take dexamethasone one hour before the infusion on day 1 and in the morning on the next day at home

<table>
<thead>
<tr>
<th>Cycle #</th>
<th>Dexamethasone to be taken on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Day 1</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>X</td>
</tr>
<tr>
<td>9 onwards</td>
<td>X</td>
</tr>
</tbody>
</table>

- Some patients may not be able to take dexamethasone
- Other patients may take prednisone instead

**Labs:**
- For the first 4 cycles, a blood test is typically done every 2 weeks
- Thereafter, blood tests are typically done every 4 weeks, within four days of your next chemotherapy cycle.

**Serious Side Effects:**
Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly important as they are directly related to the common actions of these drugs.

- Daratumumab and bortezomib may **damage sperm and may harm** the baby if used during pregnancy. It is best to use birth control while being treated with daratumumab and for at least three months after treatment has ended. Tell your doctor right away if you or your partner becomes pregnant. Do not breastfeed during treatment.
- **Infection:** You are at an increased risk for getting an infection if your white blood cells decrease. *If you have a fever over 38°C or 100°F, call your cancer doctor immediately (24 hours a day) or go immediately to your nearest Hospital Emergency and tell the doctor that you are on chemotherapy. It is recommended you have a working thermometer at home.*
• **Bleeding Problems:** You are at an increased risk of having bleeding problems if your platelets decrease. If you develop black tarry stools, blood in your urine, pinpoint red spots on the skin, or prolonged nose bleeds report them immediately to your doctor or nurse.

• Other drugs and **vitamin C supplements** may interact with bortezomib. Check with your doctor or pharmacist before you start taking any new drugs or vitamin supplements.

• **Green tea** and preparations made from green tea should be avoided throughout the entire time of treatment. These have been found to severely decrease the effectiveness of bortezomib, and might make it have no effect at all.

• The **drinking of alcohol (in small amounts)** does not appear to affect the safety or usefulness of daratumumab or bortezomib.

### Common Side Effects and Management:

<table>
<thead>
<tr>
<th>SIDE EFFECTS</th>
<th>MANAGEMENT</th>
</tr>
</thead>
</table>
| Normal 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. |
<table>
<thead>
<tr>
<th>SIDE EFFECTS</th>
<th>MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic reactions may occur. Signs of an allergic reaction may include runny or stuffy nose, throat irritation, cough, rash, itching, dizziness, and swelling or breathing problems including wheezing. This can occur immediately or several hours after receiving daratumumab.</td>
<td>Tell your nurse if this happens while you are receiving daratumumab or contact your oncologist immediately if this happens after you leave the clinic.</td>
</tr>
<tr>
<td>Pain or tenderness 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>
| Fever and chills may sometimes occur shortly after treatment with daratumumab or bortezomib. Fever should last no longer than 24 hours. | • Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day.  
• Fever (over 100°F or 38°C by an oral thermometer) which occurs more than a few days after treatment may be a sign of an infection. Report this to your doctor immediately. |
| Fatigue is common. As the number of cycles increases fatigue may improve | • Refer to the pamphlet ‘Your Bank to Energy Savings-How people with cancer can handle fatigue’.  
• Sometimes a dose change may be required.  
• Do not drive a car or operate machinery if you are feeling tired. |
| Skin rashes and itching may occur. | • To help itching you can use calamine lotion or diphenhydramine  
• If very irritating, call your doctor during office hours, otherwise make sure to mention it at your next visit. |
<table>
<thead>
<tr>
<th>SIDE EFFECTS</th>
<th>MANAGEMENT</th>
</tr>
</thead>
</table>
| **Diarrhea** may commonly occur | Diarrhea must be treated immediately with loperamide 2 mg tablets (e.g., IMODIUM®):  
• Take ONE tablet at the first sign of loose or more frequent stools than usual.  
• Then take ONE tablet every TWO hours until diarrhea has stopped for 12 hours.  
• At night, you may take ONE tablet every FOUR hours (set your alarm) during the time you usually sleep.  
• Always keep a supply of loperamide (e.g., have 48 tablets on hand). You can buy loperamide at any pharmacy without a prescription.  
To help diarrhea:  
  • Drink plenty of liquids.  
  • Eat and drink often in small amounts.  
  • Avoid high fiber foods as outlined in Food Ideas to Help Manage Diarrhea.  
  • A dietitian can give you more suggestions for dealing with diarrhea  
  • If diarrhea does not improve 24 hours after starting loperamide or lasts more than 36 hours, call your doctor. |
| **Constipation** may sometimes occur | • Exercise if you can.  
• Drink plenty of fluids.  
• Try ideas in Suggestions for Dealing with Constipation.* |
<p>| <strong>Headache</strong> may sometimes occur. | • Take acetaminophen (e.g., TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000 mg) per day. |
| <strong>Muscle, joint, or back pain</strong> may sometimes occur. | • You may take acetaminophen (e.g., TYLENOL®) every 4-6 hours to a maximum of 4 g (4000 mg) per day for mild to moderate pain. Tell your doctor if the pain interferes with your activity. |</p>
<table>
<thead>
<tr>
<th><strong>SIDE EFFECTS</strong></th>
<th><strong>MANAGEMENT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of appetite may sometimes occur.</td>
<td>• Try the ideas in Food Ideas to Help with Decreased Appetite</td>
</tr>
</tbody>
</table>
| Increased calcium in the blood may sometimes occur. | To help prevent high calcium:  
  • Keep active.  
  • Drink plenty of fluids |
| Hair loss does not occur | |
| Increased energy and difficulty sleeping may be due to dexamethasone | • The days you take your dexamethasone you may feel as though you have extra energy.  
  • You may also have difficulty sleeping at night.  
  • Take the dexamethasone first thing in the morning to prevent difficulty sleeping at night. |

*Please ask your pharmacist for a copy.*

The pharmacists at BC Cancer and the pharmacists at your oncology clinic are also available to answer your drug-related questions.

**Medication Interactions**

Some Natural Health Products may interact with this treatment. Tell your doctor if you are taking any Natural Health Products. Check with your doctor or pharmacist before you start taking any Natural Health Products.

If you experience symptoms or changes in your body that have not been described above but worry you, tell your doctor about them at the time of your next visit. If any symptoms are severe, contact:

_________________________ at telephone number ________________

If you have symptoms that are severe or need emergency services, go to your local hospital’s Emergency Department.