

## For the Patient: MYBSD

Other Names: Treatment of Multiple Myeloma using Bortezomib, Selinexor, and Dexamethasone With or Without Cyclophosphamide

**MY = MYeloma**  
**B = Bortezomib**  
**S = Selinexor**  
**D = Dexamethasone**

### **ABOUT THIS MEDICATION**

#### **What are these drugs used for?**

Bortezomib, selinexor, and dexamethasone are drugs used to treat multiple myeloma. They are sometimes used in combination with another drug called cyclophosphamide. Together these medications can slow down the growth of cancer cells, to stop multiple myeloma from getting worse.

#### **How do these drugs work?**

- Bortezomib (bor-TEZ-oh-mib), selinexor (sel" i nex' or), and cyclophosphamide (sigh-kloe-FOSS-fa-mide) work by interfering with dividing cells and preventing an increase in the number of cells.
- Dexamethasone (dex-a-METH-a-son) is a steroid drug that can be used to help kill cancer cells.

### **INTENDED BENEFITS**

- This therapy is being given to limit the growth of cancer cells in your body, and to delay the time until the cancer progresses.

### **MYBSD TREATMENT SUMMARY**

#### **How are these drugs given?**

- Your treatment plan consists of chemotherapy “cycles”. Each cycle lasts 4 weeks (28 days).
- For each cycle, you will be given one medication as a subcutaneous injection (under the skin of the abdomen or thigh), and two to three oral medications that will be taken by mouth.
  - Bortezomib is given as an injection once a week for three weeks in a row. Then there will be a one-week break without bortezomib

- Dexamethasone tablets will be given to you with instructions on how and when to take them.
- Selinexor tablets will be given to you with instructions on how and when to take them. Selinexor is commonly taken once per week on the same day each week, including the week in which bortezomib is not given.
- Sometimes cyclophosphamide tablets are given in addition to the other medications. If ordered, you will receive instructions on when and how to take them.
- You will be given a prescription for anti-nausea medications (to be filled at your regular community pharmacy). Please bring your anti-nausea medications with you to each treatment. Your nurse will tell you when to take the anti-nausea medication.
- You may also need to take anti-nausea drugs at home. It is easier to prevent nausea than to treat it once it has occurred, so follow directions closely.

**Many possible treatment schedules exist. The calendar below outlines one common treatment plan.**

TREATMENT PLAN										
C Y C L E  1	DATE	Week 1 →	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	
				<ul style="list-style-type: none"> <li>● anti-nausea medication</li> <li>● dexamethasone</li> <li>● selinexor</li> <li>● bortezomib injection</li> </ul>	dexamethasone					
		Week 2 →	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	
				<ul style="list-style-type: none"> <li>● anti-nausea medication</li> <li>● dexamethasone</li> <li>● selinexor</li> <li>● bortezomib injection</li> </ul>	dexamethasone					
		Week 3 →	Day 15	Day 16	Day 17	Day 18	Day 19	Day 20	Day 21	
				<ul style="list-style-type: none"> <li>● anti-nausea medication</li> <li>● dexamethasone</li> <li>● selinexor</li> <li>● bortezomib injection</li> </ul>	dexamethasone					
		Week 4 →	Day 22	Day 23	Day 24	Day 25	Day 26	Day 27	Day 28	
				<ul style="list-style-type: none"> <li>● anti-nausea medication</li> <li>● dexamethasone</li> <li>● selinexor</li> </ul>	dexamethasone					

**This 28-day cycle will repeat as long as treatment is working, as determined by your oncologist.**

## What will happen when I get my drugs?

- A blood test is done once a week for the first cycle, then before each cycle or as ordered by your doctor. The dose and timing of your treatment may be changed based on your blood counts and/or other side effects.
- Your first treatment will take longer than other treatments because a nurse will be reviewing the possible side effects of your treatment plan and will discuss with you how to manage them. *It is a good idea to bring someone with you to your first chemotherapy appointment.*

## What other drugs can interact with MYBSD?

- Other drugs, vitamins and supplements may interact with your treatment plan. Tell your doctor if you are taking these or any other drugs as your dose may need to be changed.
- Always check with your doctor or pharmacist before you start or stop taking any other drugs or supplements. The following list (not inclusive) includes examples of possible interactions:
  - Vitamin C supplements may interact with bortezomib
  - 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
  - Drugs such as carbamazepine (TEGRETOL®), phenytoin (DILANTIN®), and primidone (MYSOLINE®) may interact with dexamethasone
  - There may be an increased risk of potassium problems with some drugs such as digoxin (LANOXIN®) and some water pills (diuretics) such as furosemide (LASIX®) and hydrochlorothiazide (HYDRODIURIL®) while you are taking dexamethasone. Your doctor may need to monitor these drugs and their effects more closely while you are taking dexamethasone
  - Alcohol may increase the risk of some side effects of dexamethasone. Avoid drinking alcohol while being treated with dexamethasone
  - Other drugs such as allopurinol, amiodarone, digoxin (LANOXIN®), hydrochlorothiazide, indomethacin (INDOCID®), phenobarbital, phenytoin (DILANTIN®), or warfarin (COUMADIN®) may interact with cyclophosphamide

## Other important things to know:

- Tell your healthcare team if you have ever had an unusual or allergic reaction to any medication before starting this treatment
- Doses of oral medications may consist of multiple tablets; follow instructions carefully
- Tell your doctor, dentist, and other health professionals that you are being treated with bortezomib, selinexor, dexamethasone, and cyclophosphamide (if applicable) before you receive any treatment from them

- If you vomit a dose of medication, do not take a second dose. Call your healthcare team during office hours for advice as a medication to prevent nausea may be required for future doses
- This treatment may cause sterility in men and menopause in women. If you plan to have children, discuss this with your doctor before being treated
- This treatment may damage sperm and may harm the baby if used during pregnancy. It is best to use birth control while being treated and for at least one week after your last dose. Tell your doctor right away if you or your partner becomes pregnant. Do not breastfeed during treatment and for one week after your last dose.
- Store selinexor, dexamethasone, and cyclophosphamide out of the reach of children, at room temperature, away from heat, light, and moisture.

#### Dexamethasone (or alternative steroid):

- Dexamethasone may be prescribed in a variety of doses and schedules, or may be substituted for a different steroid in some situations (prednisone is a common alternative steroid)
- Take dexamethasone in the morning with food, at least one hour prior to selinexor on selinexor days
- If you miss a dose of dexamethasone, take it as soon as you can if it is within 12 hours of the missed dose. If it is over 12 hours since your missed dose, skip the missed dose and go back to your usual dosing times
- Do not stop taking dexamethasone without telling your doctor. Make sure that you always have a new supply on hand before you run out. After long term use, your dose of dexamethasone will be reduced very slowly before stopping. This helps your body adjust to making its own steroid again. Long term side effects will return to normal very slowly after stopping
- Do not have any immunizations or vaccinations without your doctor's approval while being treated with dexamethasone

#### Selinexor:

- You may take selinexor with food or on an empty stomach
- If you miss a dose of selinexor, skip the missed dose and go back to your usual dosing times. Be sure to mention it to your healthcare team at your next visit

### Cyclophosphamide:

- If cyclophosphamide is prescribed, it is recommended to take it in the morning
- Your doctor may tell you to drink plenty of liquids e.g., 8-12 cups (2000-3000 mL or 70-100 oz) a day. You may be told to empty your bladder (pass urine) frequently, every 2 hours while you are awake and at bedtime for at least 24 hours after your dose. Your doctor may also tell you to get up in the night to empty your bladder. This helps prevent bladder and kidney problems.
- If you miss a dose of cyclophosphamide, call your healthcare team during office hours to ask about making up the missed dose

### Changes in blood counts

MYBSD may cause temporary changes in your blood counts. Your doctor will be following these changes carefully by ordering regular blood tests. Adjustment of your treatment may be needed in certain circumstances.

BLOOD COUNTS	MANAGEMENT
Normal white blood cells protect your body by fighting bacteria (germs) that cause infection. <b>When they are low, you are at greater risk of having an infection.</b>	To help prevent infection: <ul style="list-style-type: none"><li>• Wash your hands often and always after using the bathroom.</li><li>• Avoid crowds and people who are sick.</li><li>• Call your healthcare team <b>immediately</b> at the first sign of an infection such as fever (over 38°C or 100°F by an oral thermometer), chills, cough, or burning when you pass urine.</li></ul>
Normal platelets help your blood to clot normally after an injury (e.g., cut). <b>When the platelet count is low, you may be more likely to bruise or bleed.</b>	To help prevent bleeding problems: <ul style="list-style-type: none"><li>• Try not to bruise, cut, or burn yourself.</li><li>• Clean your nose by blowing gently. Do not pick your nose.</li><li>• Avoid constipation.</li><li>• Brush your teeth gently with a soft toothbrush as your gums may bleed more easily.</li></ul> Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding. <ul style="list-style-type: none"><li>• Do not stop taking any medication that has been prescribed by your doctor (e.g., <b>ASA for your heart</b>).</li><li>• For minor pain, try acetaminophen (e.g., TYLENOL®).</li></ul>

**SERIOUS SIDE EFFECTS OF CHEMOTHERAPY:**

**Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly relevant to your treatment plan:**

SIDE EFFECTS	MANAGEMENT
<p><b>Nausea</b> and <b>vomiting</b> may occur during treatment with selinexor. If you are vomiting and it is not controlled, you can quickly become dehydrated.</p>	<p>You will be given a prescription for antinausea drug(s) to take at home. <b>It is easier to prevent nausea than treat it once it has occurred</b>, so follow directions closely.</p> <ul style="list-style-type: none"> <li>• Drink plenty of fluids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Try the ideas in <i>Practical Tips to Manage Nausea</i>.*</li> </ul> <p>Tell your healthcare team if nausea or vomiting continues or is not controlled with your antinausea drug(s).</p>
<p><b>Diarrhea</b> may occur during treatment with bortezomib. Selinexor may also cause diarrhea. If you have diarrhea and it is not controlled, you can quickly become dehydrated.</p>	<p>If diarrhea is a problem, start loperamide (e.g., Imodium®). Each tablet = 2 mg.</p> <ul style="list-style-type: none"> <li>• Take TWO tablets at the first sign of loose or more frequent stools than usual</li> <li>• Then take ONE tablet every two hours until diarrhea has stopped for 12 hours, to a maximum of 8 tablets daily.</li> <li>• Always keep a supply of loperamide on hand). You can buy loperamide at any pharmacy without a prescription.</li> <li>• Drink plenty of fluids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Avoid high fibre foods as outlined in <i>Food Choices to Help Manage Diarrhea</i>.*</li> </ul> <p>Tell your healthcare team if you have diarrhea for more than 24 hours.</p>
<p><b>Loss of appetite</b> and <b>weight loss</b> may sometimes occur during treatment with selinexor.</p>	<p>Try the ideas in <i>Food Ideas to Help with Decreased Appetite</i>.*</p>

SIDE EFFECTS	MANAGEMENT
<p><b>Tiredness</b> and lack of energy may commonly occur during treatment with selinexor.</p>	<ul style="list-style-type: none"> <li>• Do not drive a car or operate machinery if you are feeling tired.</li> <li>• Try the ideas in <i>Fatigue/Tiredness – Patient Handout</i>.*</li> </ul>
<p><b>Blurry vision</b> may sometimes occur and your eyes may be <b>sensitive to light</b>. Some patients develop a cataract (clouding of the lens in the eye). If you already have cataracts, you may notice your vision has gotten worse with selinexor.</p>	<p>Tell your healthcare team if you notice changes in your eyesight as you may need an eye exam to check for cataracts.</p> <p>If you have a cataract, you may need eye surgery to remove it. Your healthcare team will ask you to stop taking selinexor one day (24 hours) before your eye surgery and you will not restart selinexor until 3 days (72 hours) after your surgery.</p>
<p><b>Numbness, tingling or pain may develop in your hands and feet.</b> This is likely related to bortezomib, and may slowly return to normal once your treatments are over. This may take several months.</p>	<ul style="list-style-type: none"> <li>• Be careful when handling items that are sharp, hot or cold.</li> <li>• Tell your doctor at your next visit, especially if you have trouble with buttons, writing, picking up small objects, or pain.</li> </ul>
<p><b>Taste alteration</b> may sometimes occur.</p>	<p>Try the ideas in <i>Food Ideas to Cope with Taste and Smell Changes</i>.*</p>
<p>Minor bleeding, such as <b>nosebleeds</b>, may sometimes occur.</p>	<ul style="list-style-type: none"> <li>• Sit up straight and tip your head slightly forward. Tilting your head back may cause blood to run down your throat.</li> <li>• Pinch your nostrils shut between your thumb and forefinger or apply firm pressure against the bleeding nostril for 10 full minutes.</li> <li>• After 10 minutes, check to see if your nose is still bleeding. If it is, hold it for 10 more minutes.</li> <li>• Stay quiet for a few hours and do not blow your nose for at least 12 hours after the bleeding has stopped.</li> <li>• Get emergency help if a nosebleed lasts longer than 20 minutes.</li> </ul>
<p><b>Constipation</b> may sometimes occur.</p>	<ul style="list-style-type: none"> <li>• Exercise if you can.</li> <li>• Drink plenty of fluids.</li> <li>• Try the ideas in <i>Food Choices to Manage Constipation</i>.*</li> </ul>

SIDE EFFECTS	MANAGEMENT
<b>Headache</b> may sometimes occur.	Take acetaminophen (e.g., TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000 mg) per day.
<b>Muscle, bone, or back pain</b> 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 healthcare team if the pain interferes with your activity.
<b>Fever</b> may occur shortly after treatment with bortezomib. Fever should last no longer than 24 hours.	<ul style="list-style-type: none"> <li>• Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day.</li> <li>• Fever (over 38°C or 100°F by an oral thermometer) which occurs more than a few days after treatment may be a sign of an infection. Report this to your healthcare team <i>immediately</i>.</li> </ul>
<b>Sugar control</b> may be affected in patients with diabetes.	<ul style="list-style-type: none"> <li>• Check your blood sugar regularly if you have diabetes.</li> </ul>
<b>Swelling</b> of hands, feet, or lower legs may sometimes occur if your body retains extra fluid.	<p>If swelling is a problem:</p> <ul style="list-style-type: none"> <li>• Elevate your feet when sitting.</li> <li>• Avoid tight clothing.</li> </ul>
<b>Heartburn and indigestion</b> may occur. There may be an increased risk of stomach problems such as bleeding ulcers especially if you have had stomach problems before	<ul style="list-style-type: none"> <li>• Take your dexamethasone after eating.</li> <li>• Take antacids one hour before or two hours after dexamethasone. Antacids can reduce the amount of dexamethasone absorbed when taken at the same time.</li> </ul>
You may have <b>difficulty in falling asleep</b> on the days you take dexamethasone.	<ul style="list-style-type: none"> <li>• Mild exercise before bed (such as a walk around the block) may help.</li> </ul>

SIDE EFFECTS	MANAGEMENT
<p><b>Sore mouth</b> may occur a few days after treatment with cyclophosphamide. Mouth sores can occur on the tongue, the sides of the mouth or in the throat. <b>Mouth sores or bleeding gums can lead to an infection.</b></p>	<ul style="list-style-type: none"> <li>• Brush your teeth gently after eating and at bedtime with a very soft toothbrush. If your gums bleed, use gauze instead of a brush. Use baking soda instead of toothpaste.</li> <li>• Make a mouthwash with ¼ teaspoon baking soda AND ¼ teaspoon salt in 1 cup warm water and rinse several times a day.</li> <li>• Try the ideas in <i>Food Ideas to Try with a Sore Mouth</i>.*</li> </ul>
<p><b>Hair loss is common</b> during treatment with cyclophosphamide and may begin within 3-6 weeks after the start of treatment. Your hair may thin or you may become totally bald. Your scalp may feel tender. You may lose hair on your face and body. Your hair will grow back once your treatments are over and sometimes between treatments. Colour and texture may change.</p>	<p>Refer to <i>Resources for Hair Loss and Appearance Changes – Patient Handout</i>.*</p> <p>You may also want to:</p> <ul style="list-style-type: none"> <li>• Apply mineral oil to your scalp to reduce itching.</li> <li>• If you lose your eyelashes and eyebrows, protect your eyes from dust and grit with a broad-brimmed hat and glasses.</li> </ul>

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

**STOP TAKING DEXAMETHASONE, SELINEXOR AND CYCLOPHOSPHAMIDE AND CHECK WITH YOUR HEALTHCARE TEAM OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:**

- Signs of an **infection** such as fever (over 38°C or 100°F by an oral thermometer), shaking chills; severe sore throat, difficulty in breathing, productive cough (coughing up thick or green sputum); cloudy or foul smelling urine
- Signs of **bleeding problems** such as black or tarry stools, blood in urine, pinpoint red spots on skin, or extensive bruising.
- Signs of **severe fluid loss** due to diarrhea such as fainting, light-headedness or dizziness
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling, or breathing problems
- **Seizures** or **loss of consciousness**
- Signs of **heart or lung problems** such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty in breathing, swelling of ankles, or fainting

- Signs of **neurologic toxicity** which may be related to selinexor such as confusion, dizziness, fainting, balance problems, hallucinations, delirium, or changes in mood or behavior
- Signs of **low sodium (hyponatremia)** such as nausea, weakness, headache, or drowsiness, which may be related to selinexor
- Signs of **low blood pressure** such as light-headedness, dizziness, or fainting.
- Signs of **bleeding ulcers** such as black, tarry stools; blood in stool; continuing stomach or abdominal pain
- Signs of **bleeding problems** such as blood in urine or stools.

**CHECK WITH YOUR HEALTHCARE TEAM AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:**

- Repeated **vomiting** and cannot keep fluids or medications down.
- Problems with your **memory** or you are feeling **confused**
- **Drowsiness, dizziness, or fainting**
- Signs of **anemia** such as unusual tiredness or weakness
- Signs of **bladder problems** such as changes in urination, painful burning sensation, presence of blood or abdominal pain
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs
- **Skin rash or itching**
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Signs of **fluid problems** such as shortness of breath or difficulty breathing, swelling of feet or lower legs, rapid weight gain
- Signs of **low potassium** such as vomiting, muscle cramps or weakness, numbness or tingling of the lower legs and feet, mental confusion
- Signs of **blood sugar problems** such as thirst and frequent need to pass urine
- Changes in **eye sight**

**If you experience symptoms or changes in your body that have not been described above but worry you, or if any symptoms are severe, contact \_\_\_\_\_ at telephone number \_\_\_\_\_.**