

PHARMACY

Drug Information

VRD Regimen [Velcade® (Bortezomib), Lenalidomide (Revlimid®), Dexamethasone]



What is VRD Regimen [Velcade® (Bortezomib), Lenalidomide (Revlimid®), Dexamethasone]?

- VRD regimen is used to treat multiple myeloma. It consists of an injection Velcade® (Bortezomib), an oral cancer drug Revlimid® (Lenalidomide) and an oral/injection steroid Dexamethasone.

How is VRD Regimen Administered / Taken?

- Bortezomib is usually administered as an injection under the skin (subcutaneous) or into your vein (intravenous). Lenalidomide is taken orally. Dexamethasone can be taken orally or injected intravenously on the days of Bortezomib injections.
- Lenalidomide capsules are to be taken with or without food. The capsules should be swallowed whole; do not chew or crush the capsules. Inform your doctor or pharmacist if you have difficulty swallowing.
- If possible, handle the medication yourself. If a family member or caregiver needs to give the medication, wash hands before and after handling the medication.
- If you miss a dose of Lenalidomide, take it as soon as possible if it is within 12 hours of the missed dose. If it is more than 12 hours since your missed dose, skip the missed dose and go back to your usual dosing times.
- Your doctor will determine the frequency of your regimen.

Can VRD Regimen be Administered / Taken With Other Medications?

- Please inform your doctor or pharmacist if you are taking other medications, including Traditional Chinese Medicines, Jamu medicines or supplements.

What are the Important Side Effects of VRD Regimen?

- Medications prescribed by your doctor should be beneficial for your condition even though they may result in some inevitable side effects.

Side Effect	Management
Risk of infection can occur as Bortezomib and Lenalidomide can reduce the number of white blood cells in your blood	<ul style="list-style-type: none"> To reduce risk of infection: <ul style="list-style-type: none"> - Wash your hands after toileting. - Avoid crowds and people who are sick. - Avoid raw food. Please proceed to the A&E department immediately if you experience signs of infection such as fever with a temperature of 38°C and above, chills and shivering. Avoid taking Paracetamol (Panadol®) to relieve fever. Be aware that taking Paracetamol may mask fever and hence delay treatment of infection.
Bruising or bleeding may occur as Bortezomib and Lenalidomide can reduce the number of platelets in your blood.	<ul style="list-style-type: none"> To reduce risk of bleeding problems: <ul style="list-style-type: none"> - Do not pick your nose. - Brush your teeth gently with a soft toothbrush. - Be aware that bleeding may take a longer time to stop. Please proceed to the A&E department immediately if you experience any severe bleeding (e.g. passing a large amount of fresh blood in urine or stools, or passing black sticky stools) or significant bruising.
Nausea or vomiting	<ul style="list-style-type: none"> Take small, frequent meals. Avoid smells that precipitate nausea. Take medications for nausea or vomiting prescribed by your doctor. Avoid tight-fitting clothes around the waist.

Side Effect	Management
Diarrhoea	<ul style="list-style-type: none"> Inform your doctor if this is severe and/or does not improve with the use of medication. Drink at least two litres (8 cups) of fluids every day when you are having diarrhoea. Avoid milk or dairy products and/or high fibre food whilst you are having diarrhoea.
Numbness and tingling sensation in the hands or feet	<ul style="list-style-type: none"> Inform your doctor if you have this symptom, trouble buttoning up shirts or if you are unable to pick up objects.
Swelling, bruising, tenderness and redness of the skin at injection site	<ul style="list-style-type: none"> Apply cool compress on the area or soak in cool water for 15-20 minutes several times a day. Inform your doctor if the symptoms do not subside.
Muscle aches and joint pain	<ul style="list-style-type: none"> Mild pain can be relieved by taking Paracetamol (Panadol®). Inform your doctor if pain is not controlled by Paracetamol. Avoid Paracetamol when you are having fever. Taking regular warm baths may also help.
Fatigue or tiredness	<ul style="list-style-type: none"> Do not drive or operate machinery if you are feeling tired. Inform your doctor if fatigue is persistent or worsens.
Dizziness, light-headed or fainting spells	<ul style="list-style-type: none"> These may be signs of low blood pressure. Inform your doctor if you are on any hypertensive medications and seek medical attention if you experience these symptoms.

Side Effect	Management
Risk of reactivation of the chicken pox virus (Shingles)	<ul style="list-style-type: none"> You will be prescribed anti-viral medication to reduce the risk of this happening.
Stomach irritation	<ul style="list-style-type: none"> Inform your doctor if you experience epigastric pain. Taking Dexamethasone after meals may reduce this side effect. Your doctor may prescribe some medications to reduce the incidence of this side effect.
Weight gain	<ul style="list-style-type: none"> Dexamethasone may increase your appetite and hence causes weight gain. Keep a healthy and balanced diet.
Increase in blood sugar level	<ul style="list-style-type: none"> You may need to check your sugar level regularly if you are diabetic as Dexamethasone may cause raised blood sugar levels.
Insomnia	<ul style="list-style-type: none"> Dexamethasone may cause insomnia. Inform your doctor if you experience difficulty sleeping.
Signs of blood clot	<ul style="list-style-type: none"> Please proceed to the A&E department immediately if you experience tenderness or hardness over a vein, calf swelling and tenderness, sudden onset of cough, chest pain or shortness of breath. You will be given a blood thinner to reduce the risk of developing blood clots.
Signs of a stroke	<ul style="list-style-type: none"> Please proceed to the A&E department immediately if you experience sudden onset of severe headache, eyesight changes, slurred speech, loss of coordination, weakness or numbness in an arm or leg.

Side Effect	Management
Signs of a heart attack	<ul style="list-style-type: none"> Please proceed to the A&E department immediately if you experience chest pain spreading to arms, neck, jaw or back or if you are feeling sweaty and breathless.
Changes in the way the liver works	<ul style="list-style-type: none"> Please proceed to the A&E department immediately if you experience any yellowing of eye and skin or tea-coloured urine, pale stools or severe abdominal pain.

If you develop rashes, facial swelling or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

Are There any Special Precautions That I Need to Take?

- It is important to inform your doctor if you intend to conceive or breastfeed while taking this medication.
- Women of child-bearing potential would require pregnancy tests before treatment, every 4 weeks during treatment and 4 weeks after stopping treatment. Women must not become pregnant during treatment with VRD and must use an effective method of contraception. Men must use a condom every time they have sexual intercourse. Appropriate contraceptive measures should be taken during and up to 3 months after cessation of treatment. If pregnancy occurs during your treatment, you must inform your doctor immediately.
- VRD may have an anti-fertility effect, which could be irreversible. You should discuss with your doctor regarding fertility preservation prior to starting treatment.
- You should not breast-feed during treatment.

What Else can I do to Help My Condition?

- Exercise

Light exercise is recommended as it helps to improve mobility, balance and even emotional well-being. Avoid strenuous exercise, and rest when you are feeling tired.

- Stay positive

Understand your condition and take an active role in managing it. Do not be afraid to talk about it with your doctor/ pharmacist/ family members. Repressed feelings can be harmful to your immediate well-being and long-term health.

- Adequate hydration

Maintain adequate hydration with 2 to 3 litres (8 to 12 cups) of fluids per day unless informed by your doctor to restrict fluids. This will decrease your chances of getting constipation and also prevent dehydration.

- Medical and dental treatment

If you need to go into hospital for any reason other than cancer, always inform the doctors and nurses that you are having chemotherapy. Talk to your cancer doctor if you think you need dental treatment. Always inform your dentist that you are having chemotherapy.

How Do I Store Lenalidomide?

- Store your medication in a cool, dry place away from heat, moisture and direct sunlight.

If you have any problem with your treatment, please contact your doctor, pharmacist or nurse clinician.

Please keep all medications out of reach of children.

You can also find useful information with regards to your medication on this website:

<https://www.macmillan.org.uk/information-and-support>



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