Oxford University Hospitals NHS Foundation Trust

Giving yourself bortezomib subcutaneous injections at home

A step-by-step guide

This booklet will show you how to give yourself bortezomib subcutaneous injections at home. We hope you find this booklet a helpful reminder of the steps involved. Learning the steps will give you the confidence to safely self-administer your bortezomib at home.

Remember, it is important to stick to your treatment schedule. If you have any concerns or queries, please contact your chemotherapy team for advice.

You must not show, instruct nor allow anyone else to administer your bortezomib injections, apart from suitably trained healthcare professionals. This could be dangerous for both you and the other person.

You will also find it useful to refer to the leaflet given to you about your chemotherapy treatment and side effects.

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BEFORE YOU START

- Make sure you are giving yourself the bortezomib injection on the day it is due; check your medication record card for your dosing schedule. It is important to stick to your treatment schedule.
- If you have a high or low temperature or are feeling unwell do not give yourself the bortezomib injection. You **must** contact the Cancer and Haematology Triage Assessment Team or Day Treatment Unit and speak to a healthcare professional first.
- If you have any new or worsening of side effects, especially peripheral neuropathy symptoms (see page 19 for details), bleeding or bruising, infection and/or a raised or lowered temperature, **do not** give yourself the bortezomib injection. You **must** contact the Cancer and Haematology Triage Assessment Team or Day Treatment Unit and speak to healthcare professional first.

HOW TO GIVE YOURSELF BORTEZOMIB INJECTIONS

- 1 Wash your hands
- 2 Clean the tray and work surface
- **3** Collect equipment needed
- 4 Take your bortezomib syringe out of the fridge
- 5 Put on protective gloves
- 6 Inspect the bortezomib syringe
- 7 Attach the needle to the syringe
- 8 Find an injection site
- 9 Clean the injection site
- **10** Give your injection
- **11** Dispose of the needle, syringe and equipment
- **12** Clean the tray and work surface and dispose of the gloves
- **13** Wash your hands
- **14** Record treatment on your medication record card

1 WASH YOUR HANDS

Always wash your hands with soap and warm running water before preparing to give your bortezomib injection. Lather well and rub your hands together vigorously for at least 15 seconds (including the backs of your hands and between your fingers). Rinse your hands well and dry them on a paper towel.



2 CLEAN THE TRAY AND WORK SURFACE

- Clean the preparation area and tray using antibacterial wipes. Allow to dry.
- Select a clean, quiet area with a solid surface, away from windows, the sink and food.
- Make sure there are no pets, children, pregnant women or women of childbearing potential nearby, as bortezomib can be harmful to them.



Collect all the equipment and place it in the cleaned tray:

- needle
- gauze swab
- micropore tape
- 2 alcohol/chlorhexidine wipes
- protective gloves.

Have the purple-lidded cytotoxic bin close by.

4 TAKE YOUR BORTEZOMIB SYRINGE OUT OF THE FRIDGE

Take the bortezomib syringe out of the fridge and place in the cleaned tray approximately 30 minutes before administering. It needs to come to room temperature before being injected.

5 WEAR PROTECTIVE GLOVES

Put on appropriately sized protective gloves.



6 INSPECT THE BORTEZOMIB SYRINGE THROUGH THE PACKAGING



Before taking the syringe out of the bag, inspect the packaging and make sure it is sealed and intact. Check no spillage has occurred within the bag. If this has happened, place the entire unopened package into the purple-lidded cytotoxic bin. Contact the Day Treatment Unit immediately to arrange for a replacement syringe and disposal of the damaged package.

Before opening the packaging, check the label details on the bortezomib syringe for the following:

- it has your name on it
- it has not passed the expiry date.

If these details are correct, open the packaging and check the content of the syringe is clear, uncoloured and has no particles floating in it.

If any of the details or the content of the syringe look incorrect, do not administer the bortezomib injection. Dispose of the whole syringe and packaging in the purplelidded cytotoxic bin. Contact the Day Treatment Unit for a replacement.

7 ATTACH THE NEEDLE TO THE SYRINGE



- Open the syringe and needle pack from the corners.
- Twist off the bung on the end of the syringe (this is either white or red).
- Twist on the orange needle. Make sure it is twisted on as far as it will go or the bortezomib may leak out.
- Try to avoid touching the hub of the syringe (the top end of the syringe) and the shaft or tip of the needle when preparing and administering your injection.

8 FIND AN INJECTION SITE



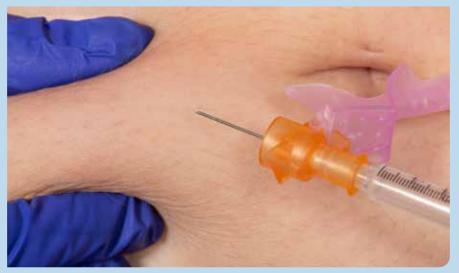
Sit comfortably, so you can see your tummy easily.

- Choose an area about 2-5cm away from your belly button. The ideal part is a fatty area where you can 'pinch an inch'.
- The subcutaneous injection must not be given into skin which is broken, hardened, inflamed, swollen, bruised or damaged by a previous injection. If you are unsure, choose a different site or ask your acute chemotherapy (AC) nurse for advice.
- Use a different injection site for each administration.

CLEAN THE INJECTION SITE

• Before injecting, clean the injection site with an alcohol/ chlorhexidine wipe and allow it to dry.

10 GIVE YOUR INJECTION



- Flip the protective cover of the needle open.
- Hold the syringe like a pencil, in the hand you write with.
- Pinch your skin at the injection site.
- Push the needle straight into this pinched area, at a 90 degree angle to your tummy.
- Inject the bortezomib solution into your tummy's fatty tissue by gently pushing the plunger down with your index finger. Push slowly, until the plunger of the syringe can go no further down the barrel. Keep hold of the fatty tissue and count to ten. Then remove the needle from your skin and release your pinch.
- If any fluid or blood leaks from the injection site, press on the site lightly with a gauze swab for 10 seconds. Place the used swab into the purple-lidded sharps bin.
- Flip the protective cover over the needle then dispose of the needle and syringe straight into the purple-lidded sharps bin. Do not detach the needle from the syringe.

11 DISPOSING OF EQUIPMENT



All equipment that has been in contact with the bortezomib or body fluid must be disposed of into the purple-lidded cytotoxic bin provided.

Do not overfill the sharps bin. When it is full up to the line shown on the label, close it securely and take it back to the Day Treatment Unit for safe disposal.

12 CLEAN THE TRAY AND WORK SURFACE

Always clean the tray and your work area with antibacterial wipes after use. Dispose of your gloves in the purple-lidded cytotoxic bin.

13 WASH YOUR HANDS

Wash your hands again with soap and warm water, as described in **Step 1**.

14 RECORD TREATMENT ON YOUR MEDICATION RECORD CARD



Remember to record that you have administered the dose on your medication record card. Take your medication record card with you to every visit at the Day Treatment Unit.

FREQUENTLY ASKED QUESTIONS

What is a bortezomib subcutaneous injection?

Bortezomib is a chemotherapy drug used to treat multiple myeloma. It may also be used to treat other types of cancer. Bortezomib can be used either on its own or with other chemotherapy drugs.

Bortezomib is given by injection under the skin, usually into the tummy (abdomen) or thigh. 'Subcutaneous' means giving the injection into the fatty tissue layer just under the skin.

The injection must not be given on areas of skin that are burned, hardened, inflamed, swollen, bruised or damaged by a previous injection.

Bortezomib injection is usually given once or twice a week. This will depend on your prescribed dose and schedule. Your doctor, chemotherapy nurse or pharmacist will explain your treatment schedule to you. It is important that you stick to your treatment schedule.

What does home self-administration mean for me?

Home self-administration means that instead of needing to travel once or twice a week to the hospital to have your injections, you can give yourself the bortezomib injections in your own home. Your doctor and chemotherapy team will work with you to make sure it is safe to have this treatment at home.

You will still need to come for hospital appointments for other medical and nursing care, as required during your treatment.

What should I expect before starting home selfadministration of bortezomib injections?

Your doctor and chemotherapy nurse will make sure that you are safe to self-administer your bortezomib injections at home.

Before you start giving yourself bortezomib injections at home you will be shown and trained how to prepare the equipment you need and how to give yourself the injection. You will be able to practice getting the injection ready and giving yourself the injection with your chemotherapy nurse guiding you. You will have the treatment schedule explained to you and you will have time to ask questions. You will also be given contact details for advice, support and information 24 hours a day.

You will be given the opportunity to practice giving yourself the injection with your chemotherapy nurse guiding you for as long it takes for you to feel confident in self-administering the injections. When you and your chemotherapy nurse are happy that you are able to safely self-administer the injection, you can start giving yourself the injection at home.

If you or your chemotherapy nurse feel it is not safe for you to give yourself the injections, or you decide you no longer want to receive your injections in this way, you can continue to have your treatment administered at the Day Treatment Unit.

Please note: You **must not** show, instruct nor allow anyone else to administer your bortezomib injections, apart from suitably trained healthcare professionals. This could be dangerous for both you and the other person.

How will I be reviewed and monitored?

During your treatment, you will be booked for regular appointments at the Myeloma clinic, where you will be reviewed by your haematology doctor.

When you start giving yourself your injections at home, you will need to visit the Day Treatment Unit on the first day of every cycle (course of treatment). During this visit you will be assessed by your chemotherapy nurse, to make sure you are well enough to continue your treatment.

If you can continue, your chemotherapy nurse will watch you give yourself the first injection of the new cycle. If, after doing this, you and your chemotherapy nurses are still happy, you can choose to continue to give yourself the rest of the injections in that cycle at home, according to your treatment schedule.

SIDE EFFECTS TO BE AWARE OF WHILST HAVING THIS TREATMENT

This treatment can have serious or possibly life-threatening side effects.

It is very important that you report any side effects straight away.

Don't delay – if you feel unwell, please contact the Cancer and Haematology Triage Assessment Team or Day Treatment Unit immediately.

Chemotherapy can cause many different side effects. Some are more likely to occur than others and not everyone gets all the side effects. The possible side effects from your treatment will be explained to you by your haematology doctor and chemotherapy nurse.

Do not administer bortezomib if you experience any of the following symptoms or side effects, or if you develop any other symptoms. Please contact the Cancer and Haematology Triage Assessment Team or Day Treatment Unit and speak to a healthcare professional first.

Infections and raised temperature

Bortezomib can reduce the number of white blood cells in your body. These help to fight infection. If you have a low number of white blood cells, you'll be more likely to get infections. A low white blood cell count is called neutropenia.

Signs of an infection include:

- a temperature of 37.5°C or above, or below 36°C
- suddenly feeling unwell, even if your temperature is normal
- feeling shivery, shaky, a sore throat, cough, diarrhoea or needing to pass urine a lot.

If you feel unwell or develop any of the symptoms above, contact the Cancer and Haematology Triage Assessment Team straight away.

Peripheral neuropathy

The feeling in your hands and feet may be affected by the bortezomib. They may feel numb, or you may have a tingling or burning sensation in the palms of your hands or soles of your feet. These symptoms are called peripheral neuropathy and are caused by the effect of bortezomib on the nerves. You may find it hard to button clothes, hold objects, or do other fiddly tasks. This may continue after the treatment has finished.

To monitor whether you are developing peripheral neuropathy, we will give you a 'Peripheral Neuropathy Questionnaire' to record any symptoms. Remember to bring this questionnaire with you every time you come to the Day Treatment Unit and your Myeloma clinic appointments.

Do not administer bortezomib if you start having these symptoms, or if they get worse, become painful or limit your daily activity and self-care. Please contact the Cancer and Haematology Triage Assessment Team or Day Treatment Unit and speak to a healthcare professional first.

Bruising and bleeding

Bortezomib can reduce the number of platelets in your blood. Platelets are cells which help the blood to clot. Do not administer bortezomib if you experience bruising or bleeding which you can't explain. This includes nosebleeds, bleeding gums, and purplish or red blood spots or rashes on your skin. Please contact the Cancer and Haematology Triage Assessment Team or Day Treatment Unit and speak to a healthcare professional first

If your platelet count is very low, you may need to come into hospital to receive a transfusion (drip) of extra platelets.

MEDICATION AND SAFETY

Who will supply the bortezomib syringes and equipment?

When you visit the Day Treatment Unit at the start of each cycle, you will be supplied with all the equipment and other medication you need for that cycle of treatment.

The bortezomib syringes for the cycle will be delivered to your home address by a homecare company. When they are delivered, please check that the syringe labels have your name on them.

Who can handle the bortezomib syringes? Bortezomib is **cytotoxic** (toxic to living cells) and hazardous to humans and animals.

Bortezomib syringes and all contaminated waste and equipment must **only** be handled by either you or a qualified healthcare professional. Always wear protective gloves when giving yourself bortezomib injections.

Bortezomib syringes and all contaminated waste and equipment must be kept out of the reach of children and animals and should never be handled by women of childbearing potential, pregnant women, or those who are breastfeeding.

If you or someone else accidentally punctures their skin with a used or unused needle (needle stick injury), **no matter how small**, you must report this and seek urgent medical attention immediately. (See page 21 and 22 for further details.)

How do I safely store the bortezomib syringes?

The bortezomib syringes must be stored in the **fridge** and **kept out of the reach of children and animals**. The syringes will be delivered in a sealed plastic outer packaging bag. Please keep the syringes sealed inside this packaging and do not unpack them until immediately before use. Place the plastic bags containing the syringes inside a clean, unbroken plastic container with a lid. Store this container away from food, to avoid contamination. Keep the plastic container lid on. Avoid direct contact with ice and do not store in the freezer. **Do not allow the syringes to freeze, as this will affect the bortezomib**.

Do not use the syringes if:

- there has been a power cut
- there have been problems with the fridge temperature
- you notice frozen solution within the syringes
- you notice the solution inside the syringes is cloudy, has changed colour, or has floating particles in it. Please make sure the solution in the syringes is clear.

Contact your hospital for replacement syringes if any of these happen.

How do I safely dispose of the syringes, contaminated waste and equipment?

You will be provided with purple-lidded sharps bins. Dispose of used needles, syringes and any contaminated waste in the purple-lidded bin immediately after use. Do not empty the contents of unused syringes. You must never discard chemotherapy medication or equipment in general household waste.

Keep the purple-lidded sharps bin securely locked at all times and store out of reach of children and animals. Do not overfill the purple-lidded sharps bin; when it is three quarters full, close it securely and return it to the Day Treatment Unit for safe disposal.

What do I do if I spill the contents of a syringe?

You will be given a Cytotoxic Spillage Kit and information about how to use it. Keep the spillage kit and information to hand, in case you need it.

If you spill the content of the syringe on to your skin, wash it off immediately. Hold the affected area under cool water for 10 minutes. Do not scrub, as unbroken skin provides protection.

If the bortezomib gets into the eyes, wash them with plenty of cold water for at least 10 minutes. **You must then go to the Eye Casualty department immediately**. Please do not drive yourself.

In case of spillage onto a surface, restrict the area by keeping all people and pets out of the contaminated area. Clean up the spillage yourself, to prevent others being exposed to the chemotherapy.

Open the spillage kit away from the contaminated area.

Do not touch the spillage area until you have put the spillage kit gloves on. Cover your clothes with the plastic apron provided in the spillage kit and wear the face mask.

Use the absorbent material in the kit to mop up any spilled liquid. Work from the outside of the spillage to the centre, to avoid further spreading of the spilled fluid.

When the chemotherapy spillage has been cleared up, place the absorbent material, the gloves and any protective clothing used into the plastic bag contained within the spillage kit. Dispose of the bag into the purple-lidded cytotoxic bin.

When the spill area has dried, wash the area with water only and leave to dry. Do not add any cleaning products. If the spillage is on a carpet, allow to dry after washing and then vacuum (please do not use a steam cleaner, as this may cause the chemotherapy to evaporate into the air, where it could be breathed in).

Contact the Day Treatment Unit to report all spillage incidents.

What do I do if there is an accidental needle stick injury?

If you or anyone else accidentally punctures their skin with the needle, encourage the puncture site to bleed, ideally by holding it under running water. Wash the wound using running water, but do not scrub it. Do not suck the wound.

Dry the wound and cover it with a plaster or dressing. You should also seek medical advice by contacting the Day Treatment Unit or Cancer and Haematology Triage Assessment Team immediately.

HOW TO CONTACT US

If you have any questions about administering your bortezomib injection, please contact the Day Treatment Unit. If it is outside of hours, please contact the Cancer and Haematology Triage Assessment Team.

Haematology Day Treatment Unit, Churchill Hospital Tel: 01865 235 554

8.00am to 6.00pm, Monday to Friday 8.00am to 4.00pm on Saturdays Closed on Sundays and Bank holidays

Brodey Centre, Horton General Hospital Tel: 01295 224 197

9.00am to 5.00pm, Monday to Friday Closed on weekends and Bank holidays

Cancer and Haematology Triage Assessment Team,

Churchill Hospital Tel: **01865 572 192**

Open 24 hours a day, 7 days a week, including Bank holidays

If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.



Author: Deputy Matron for Oncology and Haematology Myeloma Specialist Nurse Practitioner Acute Chemotherapy Nurse Lead Pharmacist for Haematology With guidance from the Divisional Quality Administrator April 2019 Review: April 2022 Oxford University Hospitals NHS Foundation Trust www.ouh.nhs.uk/information

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