How is bendamustine given?

Bendamustine is given as an intravenous infusion (into the vein). It is usually given in combination with other anti-myeloma drugs such as the steroid prednisolone, or the steroid dexamethasone and the immunomodulatory drug (IMiD) thalidomide (called BTD).

The dose of bendamustine you will have depends on your weight and height, as well as any other drugs you are being treated with.

- **120mg**: The usual dose is 120–150 mg/m² of your body surface area.
- **150mg**: The infusion is administered over 30–60 minutes.

Other information about bendamustine

Women must not take bendamustine if they are pregnant, and must not become pregnant whilst taking bendamustine, as it is expected to be harmful to an unborn baby. This means you must use effective methods of contraception while on treatment and for up to 6 months after treatment has finished if you are a woman of childbearing potential or if you are a man and your partner is a woman of child bearing potential.
What is bendamustine?

Bendamustine is a chemotherapy drug used in the treatment of myeloma. It belongs to a class of chemotherapy drugs called alkylating agents.

How does it work?

Bendamustine works by damaging the DNA within myeloma cells. Damaging the DNA stops the myeloma cells multiplying and results in their death.

Possible side effects

Bendamustine has a number of possible side effects which can vary considerably from patient to patient. It is important to report any side effects to your doctor or nurse as soon as possible so they can be treated or managed promptly.

Side effects of bendamustine are more common in the parts of the body where there are rapidly dividing cells, i.e. the hair follicles, bone marrow, skin and the lining of the mouth and digestive tract.

Effects on fertility

Bendamustine may affect your ability to become pregnant or father a child. You should talk to your doctor or nurse about how this may affect you and what your options are. It is possible that bendamustine may bring on an early menopause in women who have not yet gone through it.

Effects on the mouth

Bendamustine can cause a sore mouth and throat (oral mucositis) when given at higher doses, which can result in mouth ulcers and mouth infections. If this occurs, it can sometimes make eating, drinking and swallowing difficult. You may need intravenous fluids and/or nutritional supplements until you are able to resume eating and drinking normally.

Possible side effects

- **Sore mouth and throat**: Bendamustine can sometimes cause a sore mouth and throat (oral mucositis) when given at higher doses, which can result in mouth ulcers and mouth infections. If this occurs, it can sometimes make eating, drinking and swallowing difficult. You may need intravenous fluids and/or nutritional supplements until you are able to resume eating and drinking normally.

- **Low blood counts**: Bendamustine may cause a decrease in the number of red blood cells, white blood cells and platelets in your blood. This can cause anaemia and fatigue, as well as making you more susceptible to infection and increasing your risk of bleeding. If necessary, you can be given supportive treatment to help with these side effects and to boost your blood cell counts.

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- **Fever**: You may experience fever after receiving your bendamustine infusion. This should last no longer than 24 hours. If it does last longer than 24 hours, it may be a symptom of infection and you should inform your healthcare team as soon as possible.

Gastrointestinal disturbances

Bendamustine can cause diarrhoea, nausea, vomiting and appetite loss. While usually mild and manageable, these side effects can become problematic in some cases. Maintaining a good fluid intake and a balanced diet is important.

You may be given anti-sickness (anti-emetic) drugs to prevent or reduce nausea and vomiting. You must take them regularly as prescribed rather than waiting until you feel sick. There are several types of anti-emetic available and if the one you have been prescribed is not effective, ask your doctor to try another.

You may also be given treatment for diarrhoea. Occasionally, diarrhoea can be more severe and you may need intravenous fluids via a drip.

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  It is important you maintain good oral hygiene if you have mucositis. Your nurse will show you how to keep it clean with mouthwashes and brushes or foam sticks. Your doctor can prescribe painkillers which should help to ease any pain.

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- **Hair thinning or loss**

  You may have some thinning of your hair but it is unlikely that you will lose it completely. Thinning or loss of your hair will usually start within two to four weeks of your first dose of bendamustine. You may also have thinning or loss of eyelashes, eyebrows and other body hair.

  This is nearly always temporary and normally your hair should start to grow back a month or so after finishing treatment. During this time, you should try to avoid hair dyes and use a very mild shampoo to avoid scalp irritation.

- **Fatigue**

  Fatigue usually resolves shortly after treatment has finished. There are a number of medical and non-medical ways to help manage fatigue. For example, treatment for anaemia may reduce fatigue if it is caused by low red blood cell counts. Increasing your levels of activity and having complementary therapies such as aromatherapy or massage may also help.

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**Figure 1:** Mechanism of action of bendamustine
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If you have any questions about your treatment, speak to your medical team. They are the best people to ask if you have questions about your individual situation. The information in this publication is not meant to replace their advice.

We're here for everything a diagnosis of myeloma brings

Get in touch to find out more about how we can support you

- Call the Myeloma Infoline on ☎ 0800 980 3332
- Email Ask the Nurse at ✉ AskTheNurse@myeloma.org.uk
- Visit our website at 🌐 myeloma.org.uk