

Belantamab mafodotin (Blenrep®)

This treatment fact sheet provides information about the new myeloma treatment, belantamab mafodotin (which is also called BelaMaf for short or by the brand name, Blenrep®).

Belantamab mafodotin is not yet listed on the Pharmaceutical Benefits Scheme (PBS), the Government body that makes medicines available in Australia.

At the moment, belantamab mafodotin is available through clinical trials, where it is used to treat people with relapsed or refractory myeloma who have received a certain number of previous treatments.

When you need a new treatment for myeloma, ask your doctor if a clinical trial with belantamab mafodotin – or a clinical trial with another new treatment – may be an option for you.

What is belantamab mafodotin?

Belantamab mafodotin is the first in a new family of medicines used to treat myeloma, called an antibody-drug conjugate or ADC.

An ADC is made up of two different types of medicines that are linked together. In this combination, the monoclonal antibody, belantamab, is linked with the chemotherapy, mafodotin.

How does belantamab mafodotin work?

Belantamab mafodotin works in two different ways.

Belantamab, the monoclonal antibody part, is engineered in the laboratory to copy the process that our immune system usually uses to recognise and fight foreign substances. In this case, belantamab has been made to find a receptor on the surface of myeloma cells called B-cell maturation antigen or BCMA.

BCMA is mostly found on the surface of myeloma cells and in small amounts on healthy cells. Much like your immune system's response to bacteria, belantamab attaches to BCMA, sending a signal for your immune system to recognise and kill the cells.

Mafodotin, the chemotherapy part, is very effective at killing myeloma cells, and works better if it is guided to enter the myeloma cell by an antibody directed at myeloma. When it is given as part of the antibody molecule, the chemotherapy becomes active once it is guided to and enters the myeloma cells that have BCMA on the surface. When mafodotin enters the myeloma cells, it disrupts the skeleton of the cells and causes their death.

This means that myeloma cells are killed by both the immune system and chemotherapy.

How is belantamab mafodotin given?

Belantamab mafodotin is given as a drip into your arm, known as an intravenous or IV infusion.

The infusions are usually given from every 3 weeks to every several months depending on any side effects. They are given at a dose of 2.5mg milligrams for every kilogram (mg/kg) of your body weight and take about 30 minutes. The exact regimen used will vary according to each hospital's policy or clinical trial protocol.

How will I know if belantamab mafodotin is working?

When having treatment with belantamab mafodotin, you may notice fewer symptoms caused by your myeloma and this may give you an improved quality of life.

Your doctor will also order tests at the start of each treatment cycle to see how you are responding to treatment. These tests vary from person to person, but generally include blood and/or urine tests and occasional scans or bone marrow biopsies.

What are the possible side effects of belantamab mafodotin?

All medicines, including belantamab mafodotin, have possible side effects. These can vary a lot from person to person and may be mild or more serious.

Knowing about the possible side effects and talking openly about these with your treating team can help you to plan together and quickly get on top of any that you experience. Your team will explain more about the more common side effects, which include infusion-related reactions, problems with eyes and vision, and low blood counts.

It is very important to quickly let your treating team know about any side effects that you have while being treated with belantamab mafodotin.

Infusion-related or allergic reactions

In clinical trials, about two out of every ten people who received belantamab mafodotin experienced an infusion-related or allergic reaction, and these were mainly mild.

Let your treating team know straight away if you notice any of these signs and symptoms while you are having an infusion:

- stuffy nose, cough or itchy throat
- chills or shaking
- fever
- feeling flushed
- diarrhoea, nausea or vomiting
- difficulty breathing or tightness in your throat
- feeling tired
- high blood pressure
- feeling like your heart is racing (palpitations).

What can help?

- Your treating team will watch you closely for any signs of an infusion-related reaction.
- If you do have a reaction, your infusion may be slowed down or stopped until your symptoms have gone away. Your doctor may give you some medicine to help with the symptoms too.
- Usually, you will be able to slowly finish your infusion once your symptoms have gone.
- Depending on how severe your reaction was, your doctor may give you some medicine before your next infusion.

Eye and vision changes

Many people treated with belantamab mafodotin experience changes to the surface of the eye or cornea, called keratopathy. In some cases, these changes can lead to:

- blurred vision
- dry eyes
- worsening of eyesight.

People who already have dry eye symptoms before starting belantamab mafodotin treatment are more likely to develop eye problems.

While changes to vision can be quite alarming, these symptoms are usually reversible once treatment is stopped.

What can help?

- Your eyes will be checked by a specialist eye doctor (an ophthalmologist) before starting belantamab mafodotin and regularly while on treatment.
- The ophthalmologist will recommend using preservative-free lubricant eye drops regularly while on treatment.
- If you have severe eye or vision changes, your belantamab mafodotin dose may be reduced or your treatment may be delayed.

Remember to let your treating team know about any changes to your eyes or vision as soon as you notice them.

Low blood counts

Belantamab mafodotin can cause a decrease in the number of platelets, white blood cells and red blood cells in the blood.

Low platelet count (thrombocytopenia)

Platelets, which are also called thrombocytes, help your blood to clot. Having a low platelet count can result in bruising and bleeding.

What can help?

- Your doctor will monitor your platelet count before and during treatment.
- If your platelet count becomes too low, you may need a short break from treatment. If your platelet count is consistently low, you may need a change in dose of belantamab mafodotin.
- If your platelets need help returning to normal, you may need a platelet infusion.

Low white blood cell count

White blood cells are part of your body's immune system that help to fight infections. A low white blood cell count increases the risk of developing an infection.

What can help?

- Take extra care to prevent infections, such as washing or sanitising your hands regularly and staying away from other people with coughs, colds or other infections.
- If your white cell count stays low, you may need to have an injection of granulocyte-colony stimulating factor (G-CSF) to increase your white blood cell count. Your doctor will also prescribe medicine to help prevent infections.
- If you do develop an infection, your doctor may prescribe antibiotics.

In clinical trials, about two out of every ten people who received belantamab mafodotin developed a fever.

Having a temperature of 38°C or higher is a common sign of infection.

Always get urgent medical attention for a temperature of 38°C or more.

Low red blood cell count

Red blood cells contain haemoglobin, which contain iron and transport oxygen in your body. A low red blood cell count may cause anaemia, tiredness, and make you short of breath.

What can help?

- If you become anaemic, you may need a blood transfusion.

Fatigue

In clinical trials, about two out of every ten people who received belantamab mafodotin experienced fatigue.

It can be difficult to tell the difference between fatigue caused by a treatment or by myeloma itself.

What can help?

- You may be able to help reduce fatigue by:
 - Eating a healthy diet
 - Keeping up your fluids
 - Enjoying gentle, regular exercise
 - Having a regular sleep schedule where you go to bed and get up at the same time each day.
- Talk to your treating team about any fatigue you are feeling. Your team will keep an eye on your red blood cell count, talk to you about other medicines or issues that may be adding to your fatigue, and may prescribe medicine to help reduce fatigue.

Myeloma Australia's *Fatigue and myeloma* information sheet includes more practical tips to help you manage cancer-related fatigue.

Changes in kidney and liver function tests

Treatment with belantamab mafodotin can cause changes in your kidney and liver function tests.

Your doctor will keep a close eye on these through regular blood tests.

Effects on fertility, pregnancy and breastfeeding

Belantamab mafodotin may affect fertility in women and men, cause harm to an unborn child, and cause serious side effects in a breastfed baby. You or your partner must use contraception during treatment and for 6 months after finishing treatment. Your doctor can advise on fertility preservation options if you are planning to have children in the future.

Questions to ask my treating team

Here are some suggested questions you might like to ask your treating team to help you understand more about what to expect with your belantamab mafodotin treatment.

- How long will I continue treatment with belantamab mafodotin?
- Can you tell me more about the eye checks I need to have during belantamab mafodotin treatment?
- What brand of preservative-free lubricant eye drops should I use during belantamab mafodotin treatment?
- How often will I need to have blood tests during belantamab mafodotin treatment?
- Will my dose be changed throughout treatment?
- What should I do if I have a new or worsening side effect or symptom while on treatment?
- What should I do if I am already taking or need to start taking any other medicines?

The information in this fact sheet is not intended to replace medical care or the advice of your treating team.

Please talk to your doctor if you have any questions about your diagnosis or treatment. Your doctor can answer your questions, talk with you about your treatment goals, and provide you with extra support.

For a list of references used to develop this treatment fact sheet, please email: nurses@myeloma.org.au

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For further information please contact our Myeloma Support Nurses on our toll free Support Line:

1800 MYELOMA (1800 693 566)
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