

## Package leaflet: Information for the user

### **Bendamustine medac 25 mg powder for concentrate for solution for infusion** **Bendamustine medac 100 mg powder for concentrate for solution for infusion** bendamustine hydrochloride

**Read all of this leaflet carefully before you start using this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

#### **What is in this leaflet**

1. What Bendamustine medac is and what it is used for
2. What you need to know before you use Bendamustine medac
3. How to use Bendamustine medac
4. Possible side effects
5. How to store Bendamustine medac
6. Contents of the pack and other information

#### **1. What Bendamustine medac is and what it is used for**

Bendamustine medac is a medicine containing an active substance called bendamustine hydrochloride (hereafter called bendamustine).

Bendamustine is a medicine which is used for the treatment of certain types of cancer (cytotoxic medicine).

Bendamustine is used alone (monotherapy) or in combination with other medicines for the treatment of the following forms of cancer:

- chronic lymphocytic leukaemia in cases where fludarabine combination chemotherapy is not appropriate for you,
- non-Hodgkin's lymphomas, which had not, or only shortly, responded to prior rituximab treatment,
- multiple myeloma in cases where high-dose chemotherapy with autologous stem cell transplantation, thalidomide or bortezomib containing therapy is not appropriate for you.

#### **2. What you need to know before you use Bendamustine medac**

##### **Do not use Bendamustine medac:**

- if you are allergic to bendamustine hydrochloride or any of the other ingredients of this medicine (listed in section 6).
- while breastfeeding.
- if you have severe liver dysfunction (damage to the functional cells of the liver).
- if you have yellowing of the skin or whites of the eyes caused by liver or blood problems (jaundice).
- if you have severely disturbed bone marrow function (bone marrow depression) and serious changes in your number of white blood cells and platelets in the blood (white blood cells and/or thrombocyte values drop to  $< 3,000/\mu\text{l}$  or  $< 75,000/\mu\text{l}$ , respectively).
- if you have had major surgical operations less than 30 days before starting treatment.

- if you have an infection, especially one accompanied by a reduction in white blood cells (leucocytopenia).
- in combination with yellow fever vaccines.

### Warnings and precautions

Talk to your doctor or nurse before using Bendamustine medac

- in case of **reduced capability of the bone marrow to replace blood cells**. You should have your number of white blood cells and platelets in the blood checked before starting treatment with Bendamustine medac, before each subsequent course of treatment and in the intervals between courses of treatment.
- in case of **infections**. You should contact your doctor if you have signs of infection, including fever or lung symptoms.
- in cases of existing **heart disease** (e.g. heart attack, chest pain, severely disturbed heart rhythms).

Talk to your doctor or nurse during use of Bendamustine medac

- in cases of **nausea and vomiting**. Your doctor may give you a drug to reduce nausea (antiemetic).
- in case you notice any **pain in your side, blood in your urine or reduced amount of urine**. When your disease is very severe, your body may not be able to clear all the waste products from the dying cancer cells. This is called tumour lysis syndrome and can cause kidney failure and heart problems within 48 hours of the first dose of Bendamustine medac. Your doctor may ensure you are adequately hydrated and give you other medicines to help prevent it.
- in case of **reactions on your skin** during treatment with Bendamustine medac. The reactions may increase in severity.
- in case of painful red or purplish rash that spreads and blisters and/or other lesions begin to appear in the mucous membrane (e.g. mouth and lips), in particular if you had before light sensitivity, infections of the respiratory system (e.g. bronchitis) and/or fever.
- in case of **severe allergic or hypersensitivity reactions**. You should pay attention to infusion reactions after your first cycle of therapy.

Men receiving treatment with Bendamustine medac are advised not to conceive a child during treatment and for up to 6 months afterwards. Before starting treatment, you should seek advice on storing sperm because of the possibility of permanent infertility.

Unintentional injection into the tissue outside blood vessels (extravasal injection) should be stopped immediately. The needle should be removed after a short aspiration. Thereafter the affected area of tissue should be cooled. The arm should be elevated. Additional treatments like the use of corticosteroids are not of clear benefit (see section 4).

### Children and adolescents

There is no experience in children and adolescents with bendamustine hydrochloride.

### Other medicines and Bendamustine medac

Other medicines may be affected by bendamustine hydrochloride. They, in turn, may affect how well bendamustine hydrochloride works. Bendamustine hydrochloride can interact with:

If Bendamustine medac is used in combination with medicines which inhibit the formation of blood in the bone marrow, the effect on the bone marrow may be intensified.

If Bendamustine medac is used in combination with medicines which alter your immune response, this effect may be intensified.

Cytostatic medicines may diminish the effectiveness of live-virus vaccination. Additionally cytostatic medicines increase the risk of an infection after vaccination with live vaccines (e.g. viral vaccination).

**Tell your doctor or pharmacist** if you are using, have recently used or might use any other medicines.

### **Pregnancy, breast-feeding and fertility**

#### Pregnancy

Bendamustine medac can cause genetic damage and has caused malformations in animal studies. You should not use Bendamustine medac during pregnancy unless certainly indicated by your doctor. In case of treatment you should use medical consultation about the risk of potential adverse effects of your therapy for the unborn child and genetic consultation is recommended.

#### Fertility

If you are a woman of childbearing potential you must use an effective method of contraception both before and during treatment with Bendamustine medac. If pregnancy occurs during your treatment with Bendamustine medac you must immediately inform your doctor and should use genetic consultation.

If you are a man, you should avoid fathering a child during treatment with Bendamustine medac and for up to 6 months after treatment has stopped. There is a risk that treatment with Bendamustine medac will lead to infertility and you may wish to seek advice on conservation of sperm before treatment starts.

#### Breastfeeding

Bendamustine medac must not be administered during breastfeeding. If treatment with Bendamustine medac is necessary during lactation you must discontinue breastfeeding.

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor or pharmacist for advice before taking this medicine.

### **Driving and using machines**

No studies on the effects on the ability to drive and to use machines have been performed. Do not drive or operate machines if you experience side effects, such as dizziness or lack of coordination.

## **3. How to use Bendamustine medac**

Bendamustine medac is administered into a vein over 30 – 60 minutes in various dosages, either alone (monotherapy) or in combination with other medicines.

Treatment should not be started if your white blood cells (leukocytes) have fallen to counts below 3,000 cells/ $\mu$ l and/or your blood platelets have fallen to counts below 75,000 cells/ $\mu$ l.

Your doctor will determine these values at regular intervals.

#### Chronic lymphocytic leukaemia

- Bendamustine medac 100 mg per square metre of your body surface area (based on your height and weight): on Days 1 + 2
- Repeat the cycle after 4 weeks

#### Non-Hodgkin's lymphomas

- Bendamustine medac 120 mg per square metre of your body surface area (based on your height and weight): on Days 1 + 2
- Repeat the cycle after 3 weeks

### Multiple myeloma

- Bendamustine medac 120 – 150 mg per square metre of your body surface area (based on your height and weight): on Days 1 + 2
- Prednisone 60 mg per square metre of your body surface area (based on your height and weight) i.v. or per os.: on Days 1 – 4
- Repeat the cycle after 4 weeks

Treatment should be terminated if white blood cell (leukocyte) and/or platelet values drop to  $< 3,000/\mu\text{l}$  or  $< 75,000/\mu\text{l}$ , respectively. Treatment can be continued after white blood cell values have increased to  $> 4,000/\mu\text{l}$  and platelet values to  $> 100,000/\mu\text{l}$ .

### Impaired liver or kidney function

Dependent on the degree of impairment of your liver function it may be necessary to adjust your dose (by 30 % in case of moderate liver dysfunction). Bendamustine medac should not be used if you suffer from severe liver dysfunction. No dose adjustment is necessary in case of impairment of kidney function. Your attending doctor will decide whether a dosage adjustment is necessary.

### How it is administered

Treatment with Bendamustine medac should be undertaken only by doctors experienced in tumour therapy. Your doctor will give you the exact dose of Bendamustine medac and use the necessary precautions.

Your attending doctor will administer the solution for infusion after preparation as prescribed. The solution is administered into a vein as a short-term infusion over 30 – 60 minutes.

### Duration of use

There is no time limit laid down as a general rule for treatment with Bendamustine medac. Duration of treatment depends on disease and response to treatment.

If you are at all worried or have any questions regarding treatment with Bendamustine medac, please speak to your doctor or nurse.

### **If you forget to use Bendamustine medac**

If a dose of Bendamustine medac has been forgotten, your doctor will usually retain the normal dosage schedule.

### **If you stop using Bendamustine medac**

The doctor treating you will decide whether to interrupt the treatment or to change over to a different preparation.

If you have any further questions on the use of this medicine, ask your doctor or pharmacist.

## **4. Possible side effects**

Like all medicines, this medicine can cause side effects, although not everybody gets them.

Tissue changes (necrosis) have been observed very rarely following unintentional injection into the tissue outside blood vessels (extravascular). A burning sensation where the infusion needle is inserted may be a sign for administration outside the blood vessels. The consequence of administration in this way can be pain and poorly healing skin defects.

The dose-limiting side-effect of Bendamustine medac is impaired bone-marrow function, which usually returns to normal after treatment. Suppressed bone marrow function increases the risk of infection.

### **Very common** side effects (may affect more than 1 in 10 people)

- low counts of white blood cells (leukocytopenia)
- decrease in the red pigment of the blood (haemoglobin)

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pal (IE) Bendamustine medac 25 mg, 100 mg powder for concentrate for solution for infusion

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- low counts of platelets (thrombocytopenia)
- infections
- feeling sick (nausea)
- vomiting
- mucosal inflammation
- increased blood level of creatinine
- increased blood level of urea
- fever
- fatigue
- headache

**Common** side effects (may affect up to 1 in 10 people)

- bleeding (haemorrhage)
- disturbed metabolism caused by dying cancer cells releasing their contents into the blood stream (tumour lysis syndrome)
- reduction in red blood cells which can make the skin pale and cause weakness or breathlessness (anaemia)
- low counts of neutrophils (neutropenia)
- hypersensitivity reactions such as allergic inflammation of the skin (dermatitis), nettle rash (urticaria)
- a rise in liver enzymes AST/ALT
- a rise in the enzyme alkaline phosphatase
- a rise in bile pigment
- low potassium blood levels
- disturbed function (dysfunction) of the heart (palpitations, angina pectoris)
- disturbed heart rhythms (arrhythmia)
- low or high blood pressure (hypotension or hypertension)
- disturbed lung function
- diarrhoea
- constipation
- sore mouth (stomatitis)
- loss of appetite
- hair loss
- skin changes
- missed periods (amenorrhoea)
- pain
- insomnia
- chills
- dehydration
- dizziness

**Uncommon** side effects (may affect up to 1 in 100 people)

- accumulation of fluid in the heart sac (escape of fluid into the pericardial space)
- ineffective production of all blood cells (myelodysplastic syndrome)
- acute leukaemia

**Rare** side effects (may affect up to 1 in 1,000 people)

- infection of the blood (sepsis)
- severe allergic hypersensitivity reactions (anaphylactic reactions)
- signs similar to anaphylactic reactions (anaphylactoid reactions)
- drowsiness
- loss of voice (aphonia)
- acute circulatory collapse
- reddening of the skin (erythema)

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- inflammation of the skin (dermatitis)
- itching (pruritus)
- skin rash (macular exanthema)
- excessive sweating (hyperhidrosis)
- reduction in your bone marrow function, which may make you feel unwell or show up in your blood tests

**Very rare** side effects (may affect up to 1 in 10,000 people)

- primary atypical inflammation of the lungs (pneumonia)
- break-down of red blood cells
- rapid decrease in blood pressure sometimes with skin reactions or rash (anaphylactic shock)
- disturbed sense of taste
- altered sensations (paraesthesia)
- malaise and pain in the limbs (peripheral neuropathy)
- disease of the nervous system (anticholinergic syndrome)
- neurological disorders
- lack of coordination (ataxia)
- inflammation of the brain (encephalitis)
- increased heart rate (tachycardia)
- heart attack, chest pain (myocardial infarct)
- heart failure
- inflammation of the veins (phlebitis)
- formation of tissue in the lungs (fibrosis of the lungs)
- bleeding inflammation of the gullet (haemorrhagic oesophagitis)
- bleeding of stomach or gut
- infertility
- multiple organ failure

**Not known** side effects (cannot be estimated from the available data)

- liver failure
- renal failure
- irregular and often rapid heart rate (atrial fibrillation)
- painful red or purplish rash that spreads and blisters and/or other lesions begin to appear in the mucous membrane (e.g. mouth and lips), in particular if you had before light sensitivity, infections of the respiratory system (e.g. bronchitis) and/or fever

### **Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via HPRC Pharmacovigilance, Earlsfort Terrace, IRL – Dublin 2; Tel: +353 1 6764971; Fax: +353 1 6762517. Website: [www.hpra.ie](http://www.hpra.ie); E-mail: [medsafety@hpra.ie](mailto:medsafety@hpra.ie). By reporting side effects you can help provide more information on the safety of this medicine.

## **5. How to store Bendamustine medac**

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the label and carton after 'EXP'. The first two digits indicate the month and the last four digits indicate the year. The expiry date refers to the last day of that month.

Keep the container in the outer carton to protect the content from light.

### **Note on shelf-life after opening or preparing the solution**

Solutions for infusions prepared according to the directions listed at the end of this leaflet are stable in polyethylene bags at room temperature / 60 % relative humidity for 3.5 hours, and in a refrigerator they are stable for 2 days. Bendamustine medac contains no preservatives. The solutions should not therefore be used after these lengths of time.

From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2 ° to 8 °C, unless reconstitution/dilution (etc) has taken place in controlled and validated aseptic conditions.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## **6. Contents of the pack and other information**

### **What Bendamustine medac 25 mg powder for concentrate for solution for infusion contains**

### **What Bendamustine medac 100 mg powder for concentrate for solution for infusion contains**

The active substance is bendamustine hydrochloride.

1 vial contains 25 mg of bendamustine hydrochloride.

1 vial contains 100 mg of bendamustine hydrochloride.

After reconstitution 1 ml of the concentrate contains 2.5 mg bendamustine hydrochloride.

The other ingredient is Mannitol.

### **What Bendamustine medac 25 mg powder for concentrate for solution for infusion looks like and contents of the pack**

### **What Bendamustine medac 100 mg powder for concentrate for solution for infusion looks like and contents of the pack**

White to off-white freeze-dried powder in an amber glass vial with a stopper and alu-cap with flip-top.

Type I glass vials of 25 ml.

Type I glass vials of 50 ml.

Bendamustine medac is available in packs containing 1, 5, and 10 injection vials with 25 mg of bendamustine hydrochloride and 1 and 5 injection vials with 100 mg of bendamustine hydrochloride.

Not all pack sizes may be marketed.

### **Marketing Authorisation Holder and Manufacturer**

medac Gesellschaft für klinische Spezialpräparate mbH  
Theaterstr. 6  
22880 Wedel  
Germany

### **This medicinal product is authorised in the Member States of the EEA under the following names:**

Czech Republic	Bendamustin medac 2,5 mg/ml prášek pro koncentrát pro infuzní roztok
Denmark	Bendamustinhydrochlorid medac 2,5 mg/ml
Estonia	Bendamustine medac
Finland	Bendamustine medac 2,5 mg/ml
Ireland	Bendamustine medac 25 mg / 100 mg

Latvia	Bendamustine medac 2,5 mg/ml pulveris infūziju šķīduma koncentrāta pagatavošanai
Norway	Bendamustin medac 2,5 mg/ml
Poland	Bendamustyna medac
Portugal	Bendamustina medac
Slovak Republic	Bendamustín medac 2,5 mg/ml
Slovenia	Bendamustin medac 2,5 mg/ml prašek za koncentrat za raztopino za infundiranje
Spain	Bendamustina medac 2,5 mg/ml polvo para concentrado para solución para perfusión EFG

**This leaflet was last revised in 02/2017.**

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**The following information is intended for medical or healthcare professionals only:**

As with all similar cytotoxic substances, stricter safety precautions apply as far as nursing staff and doctors are concerned, due to the potentially genome-damaging and cancer-causing effect of the preparation.

Avoid inhalation (breathing in) and contact with the skin and mucous membranes when handling bendamustine (wear gloves, protective clothing, and possibly a face mask!). If any parts of the body become contaminated, clean them carefully with soap and water, and flush the eyes with 0.9 % (isotonic) saline solution. If possible, it is advisable to work on a special safety work bench (laminar flow) with a disposable absorbent sheet that is impermeable to liquids. Contaminated articles are cytostatic waste. Please comply with national guidelines on the disposal of cytostatic material! Pregnant staff must be excluded from working with cytostatics.

The solution ready for use must be prepared by dissolving the contents of an injection vial of Bendamustine medac exclusively in water for injections, as follows:

1. Preparation of the concentrate

- One injection vial of Bendamustine medac containing 25 mg of bendamustine hydrochloride is first dissolved in 10 ml by shaking
- One injection vial of Bendamustine medac containing 100 mg of bendamustine hydrochloride is first dissolved in 40 ml by shaking

2. Preparation of the solution for infusion

As soon as a clear solution is obtained (generally after 5 – 10 minutes), the total recommended dose of Bendamustine medac is immediately diluted with 0.9 % (isotonic) saline solution to obtain a final volume of approximately 500 ml. Bendamustine medac must not be diluted with other solutions for infusion or injection. Bendamustine medac must not be mixed in an infusion with other substances.