





**Bendamustine Hydrochloride**  
**Lyophilized powder for Concentrate for Solution for Infusion**  
**(25mg & 100mg)**  
**For IV infusion after reconstitution and dilution**

**Read this entire leaflet carefully before you start taking this medicine.**

- Keep this leaflet. You may need to read it again.
- If you have further question, ask your doctor or your pharmacist.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.

**In this leaflet:**

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

**1. What Benetra® is and what it is used for**

Benetra® (Bendamustine HCl) is an alkylating agent. It leads to cell death via single and double strand DNA cross-linking. Bendamustine Hydrochloride, the active substance of Benetra® is a bi-functional mechlorethamine derivative containing a purine-like benzimidazole ring. Benetra® is used for:

- Treatment of chronic lymphocytic leukemia
- Treatment of non-Hodgkin's lymphoma
- Treatment of multiple myeloma

**2. What you need to know before you take Benetra®**

**Do not use Benetra®**

- if you are allergic to bendamustine hydrochloride or any of the other ingredients of this medicine (listed in section 6);
- while breast-feeding, if treatment with Benetra® is necessary during lactation you must discontinue breast-feeding (see section warnings and precautions on 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;
- 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 (leukocytopenia);
- in combination with yellow fever vaccines.

**Warnings and precautions**

**Talk to your doctor, pharmacist or nurse before using Benetra®.**

- 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 Benetra®, 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.
- At any time during or after your treatment, tell your doctor immediately if you notice or someone notices in you: memory loss, trouble thinking, difficulty walking or sight loss - these may be due to a very rare but serious brain infection which can be fatal (progressive multifocal leukoencephalopathy or PML).
- in case of reactions on your skin during treatment with Benetra®. The skin reactions may increase in severity.
- Contact your doctor if you notice any suspicious skin changes because there may be an increased risk of certain types of skin cancer (non-melanoma skin cancer) with the use of this medicine.
- 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 cases of existing heart disease (e.g. heart attack, chest pain, severely disturbed heart rhythms).
- 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 tumor lysis syndrome and can cause kidney failure and heart problems within 48 hours of the first dose of Benetra®. Your doctor may ensure you are adequately hydrated and give you other medicines to help prevent it.
- in case of severe allergic or hypersensitivity reactions. You should pay attention to infusion reactions after your first cycle of therapy.
- Benetra® should be used with caution in patients with cardiac disorders. Monitoring of serum potassium and ECG is recommended.

**Contra-indications**

Jaundice, low leucocyte count, low platelet count, major surgery less than 30 days before start of treatment, severe bone marrow suppression

**Monitoring**

In the event of treatment-related myelosuppression, monitor leukocytes, platelets, hemoglobin, and neutrophils frequently. Monitor hemoglobin and white blood cell differential counts every week initially, and monitor platelet counts each cycle. Monitor for infections. Monitor for infusion reactions and anaphylaxis; discontinue drug for severe reactions.

Monitor infusion site for redness, swelling, pain, infection, and necrosis during and after Benetra® administration. Monitor blood chemistry, particularly potassium and uric acid level, for the development of tumor lysis syndrome. Closely monitor patients with skin reactions.

**Important safety information**

Monitor for opportunistic infections, hepatitis B reactivation

**Other medicines and Benetra®**

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

If Benetra® 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 Benetra® 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).

**Pregnancy, breast-feeding and fertility**

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 using this medicine.

**Pregnancy**

Benetra® can cause genetic damage and has caused malformations in animal studies. You should not use Benetra® 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.

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

**Breast-feeding**

Benetra® must not be administered during breast feeding. If treatment with Benetra® is necessary during lactation you must discontinue breast-feeding.

Ask your doctor or pharmacist for advice before taking any medicine.

**Fertility**

Men receiving treatment with Benetra® are advised not to father 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.

**Driving and using machines**

Benetra® has major influence on the ability to drive and to use machines. Do not drive or operate machines if you experience side effects, such as dizziness or lack of coordination.

**3. How to take Benetra®**

Always use this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure. Benetra® 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) and/or your blood platelets have fallen to counts below determined levels. Your doctor will determine these values at regular intervals.

**Chronic lymphocytic leukemia**

- Benetra® 100 mg per square meter of your body surface area (based on your height and weight) on Days 1+2  
 Repeat the cycle after 4 weeks up to 6 times

**Non-Hodgkin lymphomas**

- Benetra® 120 mg per square meter of your body surface area (based on your height and weight) on Days 1+2  
 Repeat the cycle after 3 weeks at least 6 times

**Multiple myeloma**

- Benetra® 120 - 150 mg per square meter of your body surface area (based on your height and weight) on Days 1+2  
 - Prednisone 60 mg per square meter of your body surface area (based on your height and weight) by injection or orally on Days 1 - 4.  
 Repeat the cycle after 4 weeks at least 3 times

Treatment should be terminated if white blood cell (leukocyte) and/or platelet values dropped to determined levels. Treatment can be continued after white blood cell and platelet values have increased.

**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).

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 Benetra® should be undertaken only by doctors experienced in tumor therapy. Your doctor will give you the exact dose of Benetra® 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 Benetra®. Duration of treatment depends on disease and response to treatment. If you are at all worried or have any questions regarding treatment with Benetra®, please speak to your doctor or nurse.

**If you forget to use Benetra®**

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

**If you stop using Benetra®**

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 product, ask your doctor or pharmacist.

**4. Possible side effects**

**Common or very common**

Alopecia, amenorrhea, anemia, angina pectoris, appetite decreased, arrhythmias, cardiac disorder, chills, constipation, decreased leucocytes, dehydration, diarrhea, dizziness, fatigue, fever, hemorrhage, headache, hepatitis B reactivation, hypersensitivity, hypertension, hypokalemia, hypotension, increased risk of infection, insomnia, mucositis, nausea, neutropenia, pain, palpitations, respiratory disorders, skin reactions, stomatitis, thrombocytopenia, tumor lysis syndrome, vomiting, gastrointestinal disturbances, asthenia, malaise, dry mouth, somnolence, cough, mucosal inflammation, infusion reactions include fever, chills, pruritus, and rash

**Uncommon**

Bone marrow disorders, heart failure, myocardial infarction, neoplasms, pericardial effusion

**Rare or very rare**

Anticholinergic syndrome, aphonia, ataxia, circulatory collapse, drowsiness, hemolysis, hyperhidrosis, infertility, multi organ failure, nervous system disorder, paresthesia, peripheral neuropathy, sepsis, taste altered, anaphylactic reactions

**Frequency not known**

Extravasation necrosis, hepatic failure, necrosis, progressive multifocal leukoencephalopathy (PML), renal failure, severe cutaneous adverse reactions (SCARs)

**5. How to store Benetra®**

Keep out of the reach and sight of children.

Store in the original package in order to protect from light.

Store Benetra® (25 mg/vial or 100 mg/vial) below 25°C.

Do not store in refrigerator.

Do not freeze.

Reconstituted Benetra® should be administered immediately after preparation because of microbiological concerns. If not used immediately, in-use storage times and conditions prior to use are the responsibility of user.

Do not use Benetra® after the expiry date which is stated on the box after "Exp".

Medicines should not be disposed of via wastewater or household waste. Ask your pharmacist how to dispose of medicines no longer required. These measures will help to protect the environment.

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

What Benetra® (Lyophilized powder for concentrate for solution for infusion - 25 mg & 100mg) contains:

The active substance is Bendamustine hydrochloride, other ingredients are Mannitol and t-Butanol.

What Benetra® looks like:

White to off-white lyophilized cake or powder

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 Benetra® (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.

Pregnant staff must be excluded from working with cytostatic.

The solution ready for use must be prepared by dissolving the contents of a vial of Benetra® exclusively in **water for injections**, as follows:

**1. Preparation of the concentrate**

- 25 mg Benetra® vial: Add 5 mL of only Sterile Water for Injection.  
 - 100 mg Benetra® vial: Add 20 mL of only Sterile Water for Injection.  
 Shake well to yield a clear, colorless to a pale yellow solution with a bendamustine hydrochloride concentration of 5 mg per mL. The lyophilized powder should completely dissolve in 5 minutes. The reconstituted solution must be transferred to the infusion bag within 30 minutes of reconstitution. If particulate matter is observed, the reconstituted product should not be used.

**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 Benetra® is immediately diluted with 0.9% (isotonic) saline solution to obtain a final volume of approximately 500 mL.

**Benetra® must not be diluted with other solutions for infusion or injection. Benetra® must not be mixed in an infusion with other substances.**

**3. Administration**

The solution is administered by intravenous infusion over 30-60 min. The vials are for single use only. Any unused product or waste material should be disposed of in accordance with local requirements. Unintentional injection into the tissue outside blood vessels (extravasation injection) should be stopped immediately. The needle should be removed after a short aspiration. Thereafter the affected area of tissue should be cooled. Additional treatments like the use of corticosteroids are not of clear benefit.

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 Sobhan Oncology Co.	
Leaflet	BENETRA
Color	PANTONE 295 U  PANTONE 185 U 
Size	180 mm x 250 mm    Tolerance: 1±mm
Grammage	58-70 g/m <sup>2</sup>
File Name	BNBL-0000-LF-01
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