Package leaflet: Information for the patient

BACTERIPIME 1 g powder for solution for injection/infusion
(Cefepime dihydrochloride monohydrate)

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.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- 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 Bacteripime is and what it is used for

Bacteripime is a broad-spectrum cephalosporin antibiotic for intramuscular and intravenous administration.

Bacteripime is indicated in the treatment of infections caused by bacteria susceptible to cefepime, resistant to other antibiotics:
- lower respiratory tract infections, including pneumonia and bronchitis;
- uncomplicated and complicated urinary tract infections, including pyelonephritis;
- skin and subcutaneous tissue infection;
- intrabdominal infection, including peritonitis, and biliary tract infections;
- gynecological infections;
- treatment of patients with bacteremia that is related or suspected to be related to any of the infections listed above;
- empirical therapy for febrile neutropenia (reduction of neutrophil leukocytes in peripheral blood).

Pediatric Patients

Bacteripime is indicated for the treatment of pediatrics for infections listed below caused by susceptible bacteria:
- pneumonia;
- uncomplicated and complicated urinary tract infections, including pyelonephritis;
- skin and subcutaneous tissue infection;
- treatment of patients with bacteremia that is related or suspected to be related to any of the infections listed above;
- empirical therapy for febrile neutropenia;
- bacterial meningitis.

If you do not feel better or your condition worsens, you should seek medical attention.

2. What you need to know before you take Bacteripime

Do not use Bacteripime
- if you are allergic (hypersensitive) to cefepime or any of the other ingredients of this medicine (listed in section 6);
- if you are allergic to cephalosporins or any other beta-lactam antibiotics (e.g. penicillins, monobactams and carbapenems).

Warnings and precautions
Talk to your doctor or pharmacist, before using Bacteripime:
- If you are allergic to Бацтерипиме, any of the excipients, cephalosporins or other beta-lactam antibiotics (eg penicillin, monobactams and carbapenems), tell your doctor.
- If you have or have had kidney or liver disease, colitis or gastrointestinal problems, tell your doctor. If you have or have had kidney or liver disease, colitis or gastrointestinal problems, tell your doctor. This should be taken into account in patients with diarrhea during treatment with Bacteripime.
- If you are pregnant or planning to become pregnant, or if you are breast-feeding, tell your doctor.

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

Pregnancy, breast-feeding and fertility
Ask your doctor or pharmacist for advice before taking any medicine.
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.
The safety of Bacteripime has not been established as no relevant controlled studies have been performed in pregnant patients. This drug can be used during pregnancy only if there are clear indications for use. Bacteripim is excreted in very small amounts in milk. Therefore, it should be used with caution in breast-feeding patients.

Driving and using machines
There have been no studies on the effects on the ability to drive and use machines. However, you may experience disturbed consciousness, dizziness, confusion and hallucination, which may compromise the ability to drive and use machines.

3. How to use Bacteripime

Always use this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure.

The usual dose for adults and children > 40 kg (over 12 years) with normal renal function is 1 g, administered intravenously or intramuscularly every 12 hours. The usual duration of treatment is 7 to 10 days; more serious infections may require a longer treatment.
The dose, route of administration and duration vary depending on the susceptibility of the causative agents, the severity of the infection and the renal function of the patient. Table 1 shows the recommended dosing regimens:

Table 1

Mild to moderate urinary tract infections	500 mg – 1 g i.v., i.m.	Every 12 hours
Other mild to moderate infections	1 g i.v., i.m.	Every 12 hours

Severe infections	2 g i.v.	Every 12 hours
Very severe infection or life-threatening infections	2 g i.v.	Every 8 hours

Pediatric patients with normal renal function (at the age of 1 month to 12 years)
Recommended dosage

Pneumonia, urinary tract infections, skin and subcutaneous tissue infection: Patients > 2 months with weighing ≤ 40 kg: 50 mg/kg every 12 hours for 10 days. In more severe infections, the 8 hours interval between the intakes should be done.
Septicemia, bacterial meningitis and empirical treatment of febrile neutropenia: Patients > 2 months with weighing ≤ 40 kg: 50 mg/kg every 8 hours for 7-10 days. Experience with Bacteripime in pediatric patients < 2 months is limited. Data obtained after use of a dose of 50 mg/kg and modeling of pharmacokinetic parameters obtained in patients > 2 months indicate that a dose of 30 mg/kg every 12 hours or 8 hours can be administered to patients aged 1 to 2 months. The two doses of 50 mg/kg for patients > 2 months and 30 mg/kg for patients between 1 and 2 months are comparable to a dose of 2 g in adults. The use of Bacteripime in these patients should be closely monitored. In children weighing > 40 kg, the dosage recommended for adults is used (see Table 1). In patients over 12 years of age weighing ≤ 40 kg, the dosage is the same as for younger patients weighing ≤ 40 kg. The dosage in children should not exceed the maximum recommended dose for adults (2 g every 8 hours). Experience with intramuscular administration of the drug in pediatric patients is limited.

Elderly
No dose adjustment is required unless there is concomitant renal impairment.

Patients with impaired liver function
No dose adjustment is required in patients with hepatic impairment.

Patients with impaired renal function
In patients with impaired renal function, the dose of Bacteripime should be adjusted to compensate for the slower elimination through the kidneys. The recommended starting dose of Bacteripime in patients with mild to moderate renal impairment should be the same as in patients with normal renal function.

Dialysis patients
In hemodialysis, about 68% of the total amount of Bacteripim in the body is removed within a 3-hour dialysis period. A dose equivalent to the starting dose should be given at the end of each dialysis session. For long-term outpatient peritoneal dialysis, Bacteripime can be administered every 48 hours at the normal recommended doses: 500 mg, 1 g, 2 g depending on the severity of the infection.

Route and method of administration
Bacteripime is administered intravenously or deep intramuscularly to a large muscle mass. Intravenous administration is preferred for severe and life-threatening infections, especially if there is a risk of shock.

If you are given more Bacteripime than you should
As this medicine is used under strict medical supervision, there is no possibility of overdose or it is minimal. In case of overdose, especially in patients with impaired renal function, dialysis is used to remove Bacteripim from the body (hemodialysis is preferred to peritoneal dialysis).

4. Possible side effects

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

The following adverse reactions were observed in clinical trials or in the post-marketing setting:

Very common (can affect more than 1 user in 10):
Positive Coombs test.

Common (can affect up to 1 user in 10):
- anaemia;
- eosinophilia;
- phlebitis at the infusion site;
- diarrhoea;
- rashes;
- infusion site reaction;
- pain on the injection site;
- inflammation on the injection site;
- increased alkaline phosphatase;
- increased alanine aminotransferase;
- increased aspartate aminotransferase;
- increased bilirubin в кръвта;
- prolonged prothrombin time;
- prolonged partial thromboplastin time.

Uncommon (can affect up to 1 user in 100):
- oral candidiasis;
- vaginal infection;
- thrombocytopenia
- leukopenia;
- neutropenia;
- headaches;
- pseudomembranous colitis (inflammatory changes in the intestine);
- colitis;
- nausea;
- vomiting;
- erythema;
- urticaria;
- pruritus;
- fever;
- inflammation on the infusion site;
- elevated blood urea, serum creatinine.

Rare (can affect up to 1 user in 1 000):
- candidiasis;
- anaphylactic reaction;
- angioedema;
- convulsions;
- paresthesia;
- taste changes;
- dizziness;
- vascular dilation;
- shortness of breath;
- abdominal pain;
- constipation;
- genital itching;
- chills.

Not known (unknown frequency):

- aplastic anaemia;
- haemolytic anaemia;
- agranulocytosis;
- anaphylactic reaction shock;
- confusion;
- hallucinations;
- coma;
- torpidity;
- encephalopathy;
- disturbed consciousness;
- myoclonus;
- bleeding;
- toxic epidermal necrolysis;
- Stevens-Johnson syndrome;
- erythema multiforme;
- renal failure;
- toxic nephropathy;
- false positive urine glucose test results.

Reporting of side effects
If you get any side effects, talk to your doctor. This includes any possible side effects not listed in this leaflet. You can also report side effects directly (see details below). By reporting side effects you can help provide more information on the safety of this medicine.

Bulgarian Drug Agency
8 Damyan Gruev Str.
1303 Sofia, Bulgaria
Tel.: +359 2 8903417
website: www.bda.bg

5. How to store Bacteripime

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

Undissolved vial Bacteripime 1 g powder for solution for injection or infusion should be stored in a dry place without special storage conditions.

Do not use Bacteripime after the expiry date which is stated on the packaging. he expiry date refers to the last day of that month.

Use immediately after reconstitution..

6. Contents of the pack and other information

What Bacteripime contains

- The active substance is: cefepimeцефепим (as cefepime dihydrochloride monohydrate).
- The other ingredients are: L-arginine.

What Bacteripime looks like and contents of the pack

15 ml glass vials with gray rubber stopper and aluminum seal.

Bakteripim is available in packs of 1, 10 or 100 vials, accompanied by a patient leaflet.

Marketing Authorization Holder and Manufacturer
Tchaikapharma High Quality Medicines Inc.
1 G. M. Dimitrov Blvd, Sofia 1172, Bulgaria
Tel. : + 359 2 962 54 54
FAX: + 359 2 9603 703
e-mail: info@tchaikapharma.com

For any information about this medicine, please contact the local representative of the Marketing Authorization Holder:

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This leaflet was last approved
August, 2019

Information for healthcare professionals

For Intravenous Injection: This route of administration is preferred in patients with severe, life-threatening infections, especially if there is a risk of shock. For direct intravenous administration, prepare Bacteripim with sterile water for injections, 5% dextrose or 0.9% sodium chloride, using the reconstitution volumes shown in Table 2. Slowly inject directly into the vein over a period of three to five minutes or inject into the infusion system to give the patient a compatible intravenous solution. For intravenous infusion, a 1 g vial of Bacteripime should be reconstituted as indicated above for direct intravenous infusion, then added to the appropriate amount of solution obtained to an intravenous container with one of the compatible intravenous infusion solutions. The resulting solution should be applied in about 30 minutes.
For Intramuscular Injection: Bacteripime should be prepared with one of the following solvents using the volumes given in Table 2 for sterile water for injections, 0.9% sodium chloride, 5% dextrose or bacteriostatic water for injections with parabens or benzyl alcohol, then apply deep muscle in large muscle groups (such as the upper outer quadrant of the gluteus). In pharmacokinetic studies, doses up to 1 g (volumes <3.1 ml) were administered at two injection sites.

Although Bacteripime can be prepared with 0.5% or 1% lidocaine hydrochloride, such administration is not usually required because Bacteripime when administered intramuscularly causes mild pain or is painless.

Table 2. Preparation of Bakteripim solutions

	Volume of solvent added (ml)	Approximate concentration of cefepime dihydrochloride monohydrate

VENOUS APPLICATION 1 g vial	10,0	90
MUSCLE APPLICATION 1 g	3,0	230

Compatibility

Intravenous administration: Bacteripime is compatible at concentrations between 1 and 40 mg / ml with one of the following infusion fluids: 0.9% sodium chloride, 5% and 10% dextrose for injection, M / 6 sodium lactate for injection, 5% dextrose and 0.9 % sodium chloride for injection, lactate Ringer and 5% dextrose for injection.
Possibility of mixing Bacteripime and stability of the solutions summarized in the table.
Bacteripime solutions, like most beta-lactam antibiotics, should not be added to solutions of metronidazole, vancomycin, gentamicin, tobramycin sulphate or netilmicin sulphate due to physical or chemical incompatibilities. If concomitant treatment with Bacteripime is required, these antibiotics should be used separately.

Muscular application: Bacteripime prepared as shown in Table 2 should be used immediately after reconstitution when the following solutions are used: sterile water for injections, bacteriostatic water for injections with parabens or benzyl alcohol, 0.9% sodium chloride, 5% dextrose. Although Bacteripime can be prepared with 0.5% or 1% lidocaine hydrochloride, such administration is not usually required because the medicinal product, when administered intramuscularly, causes mild pain or is painless.
Note: Parenteral medicines should be inspected visually for particulate matter prior to administration and should not be administered if any particulate matter is present. As with other cephalosporins, the reconstituted solution may darken to an amber color without losing activity.

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.