

Ceftolozane/ Tazobactam (repeal of the exemption: bacterial infections, several therapeutic indications)

Resolution of: 3 November 2022
Entry into force on: 3 November 2022
Federal Gazette, BAnz AT 01 12 2022 B4

Valid until: unlimited

Therapeutic indication (according to the marketing authorisation of 25 July 2022):

Zerbaxa is indicated for the treatment of the following infections in adult and paediatric patients:

- Complicated intra-abdominal infections;
- Acute pyelonephritis;
- Complicated urinary tract infections.

Zerbaxa is also indicated for the treatment of the following infection in adult patients (18 years or older):

- Hospital-acquired pneumonia (HAP), including ventilator-associated pneumonia (VAP).

Consideration should be given to official guidance on the appropriate use of antibacterial agents.

Therapeutic indication of the resolution (resolution of 3 November 2022):

Treatment of the following infections in adults:

- Complicated intra-abdominal infections;
- Acute pyelonephritis;
- Complicated urinary tract infections;
- Hospital-acquired pneumonia (HAP), including ventilator-associated pneumonia (VAP)

1. Extent of the additional benefit and significance of the evidence

For the medicinal product Zerbaxa with the combination of active ingredients ceftolozane/tazobactam, an exemption from the obligation to submit the evidence according to Section 35a, paragraph 1, sentence 3, numbers 2 and 3 SGB V was granted by resolution of 20 January 2022, as it is a reserve antibiotic within the meaning of Section 35a, paragraph 1c, sentence 1 SGB V. The additional benefit is deemed to be proven if the Federal Joint Committee has decided on an exemption for a reserve antibiotic in accordance with Section 35a, paragraph 1c, sentence 1 SGB V; the extent of the additional benefit and its therapeutic significance are not to be assessed by the Federal Joint Committee. By resolution pursuant to Section 35a, paragraph 3, sentence 1 SGB V, the Federal Joint Committee shall specify requirements for a quality-assured application of the reserve antibiotic, taking into account the effects on the resistance situation.

a) Adults with complicated intra-abdominal infections

Additional benefit of ceftolozane/ tazobactam:

The additional benefit is considered proven.

b) Adults with acute pyelonephritis

Additional benefit of ceftolozane/ tazobactam:

The additional benefit is considered proven.

c) Adults with complicated urinary tract infection

Additional benefit of ceftolozane/ tazobactam:

The additional benefit is considered proven.

d) Adults with hospital-acquired pneumonia, including ventilator-associated pneumonia

Additional benefit of ceftolozane/ tazobactam:

The additional benefit is considered proven.

2. Number of patients or demarcation of patient groups eligible for treatment

a) Adults with complicated intra-abdominal infections

and

b) Adults with acute pyelonephritis

and

c) Adults with complicated urinary tract infection

and

d) Adults with hospital-acquired pneumonia, including ventilator-associated pneumonia

approx. 2,600 – 6,600 patients

3. Requirements for a quality-assured application

The requirements in the product information are to be taken into account. The European Medicines Agency (EMA) provides the contents of the product information (summary of product characteristics, SmPC) for Zerbaxa (active ingredient: ceftolozane/ tazobactam) at the following publicly accessible link (last access: 20.05.2022):

https://www.ema.europa.eu/en/documents/product-information/zerbaxa-epar-product-information_en.pdf

The requirements for a quality-assured application of ceftolozane/ tazobactam apply to all approved therapeutic indications as of May 2022.

Ceftolozane/ tazobactam is indicated in adults

- for the treatment of complicated intra-abdominal infections;
- for the treatment of acute pyelonephritis;
- for the treatment of complicated urinary tract infections;
- for the treatment of hospital-acquired pneumonia, including ventilator-associated pneumonia

only if there is evidence or, in exceptional cases, an urgent suspicion that the infection is caused by multi-drug resistant aerobic Gram-negative organisms and only limited treatment options are available (see also information on pathogen detection).

Before using ceftolozane/ tazobactam, consult a specialist with an additional qualification in infectiology, a specialist in internal medicine and infectiology, or a specialist in microbiology, virology and epidemiology of infectious diseases. In case of unavailability of the above-mentioned groups of specialists at the time of use, a specialist with appropriate experience in the treatment of infectious diseases with multi-drug resistant pathogens must be consulted.

Additional antibiotics must be used if it is known or suspected that Gram-positive or anaerobic organisms are also involved in the infection.

Serious and occasionally lethal hypersensitivity reactions (anaphylactic reactions) are possible. If a severe allergic reaction occurs during treatment with ceftolozane/ tazobactam, discontinue the medicinal product and take appropriate measures. Patients with a history of hypersensitivity to cephalosporins, penicillins or other beta-lactam antibiotics may also be hypersensitive to ceftolozane/ tazobactam. Ceftolozane/ tazobactam is also contraindicated in patients with severe hypersensitivity (e.g., anaphylactic reaction, severe skin reaction) to other beta-lactam antibiotics (e.g., penicillins or carbapenems). Ceftolozane/ tazobactam should be used with caution in patients with any other known hypersensitivity reactions to penicillins or to other beta-lactam antibiotics.

Notes on pathogen detection

The reserve antibiotic may only be used as part of a targeted therapy. Before use, the causative pathogen and sensitivity to pathogen must always be proven by microbiological diagnostics of appropriate clinical material.

A calculated (empirical) use of ceftolozane/ tazobactam without pathogen detection should only be carried out in exceptional cases. These include a known resistance problem in the treatment facility or in the case of a transfer from a facility with a known resistance problem, as well as in the case of a lack of therapeutic response to standard antibiotic therapy in the case of a serious infection and urgent suspicion that the infection is caused by multi-drug resistant aerobic Gram-negative organisms. Samples for pathogen detection must be taken before the start of treatment. The calculated therapy must usually be adjusted after a maximum of 72 hours, if necessary, when an antibiogram is available.

Ceftolozane/ tazobactam may not be used if the pathogen shows sensitivity to other antibiotics (without reserve status), unless other antibiotics cannot be used, for example because of contraindications or expected severe complications.

Notes on implementation

The current guidelines of the AWMF and medical and, if applicable, also international scientific-medical societies for the appropriate use of antibiotics must be taken into account. Furthermore, reference should be made to the listed requirements for a quality-assured application of ceftolozane/ tazobactam in the locally available treatment guidelines and regulations of the measures for restrictive antibiotic use.

The aforementioned specifications are to be implemented within the framework of regulations of the hospital's Drug Commission. Implementation should take place in particular within the framework of the in-house Antibiotic Stewardship Programme (ABS)¹.

The treatment facility or clinic must have a local clearance policy for the use of ceftolozane/ tazobactam in the respective treatment facility.

The restriction measures shall be drafted and explained in writing.

Consumption and resistance surveillance in accordance with Section 23, paragraph 4 Infection Protection Act must be implemented. This is to be done through participation in the AVS (Antibiotic Consumption Surveillance) and ARS (Antibiotic Resistance Surveillance) or ARVIA (ARS and AVS – Integrated Analysis) systems.

The reporting of consumption and resistance data on ceftolozane/ tazobactam to the above systems shall be ensured by 1 January 2024 at the latest.

Until participation in the mentioned systems, consumption and resistance situation must be ensured via the existing systems.

The principles of antibiotic therapy of the Commission on Anti-infectives, Resistance and Therapy (ART) at the Robert Koch Institute must be observed (last access: 25.10.2022):

<https://www.rki.de/DE/Content/Kommissionen/ART/Links/Grundsaeetze-der-Therapie.html>

¹ See S3 guideline: strategies to ensure rational antibiotic use in hospitals, 2018 update:
https://www.awmf.org/uploads/tx_szleitlinien/092-001l_S3_Strategien-zur-Sicherung-rationaler-Antibiotika-Anwendung-im-Krankenhaus_2020-02.pdf

4. Treatment costs

Annual treatment costs:

a) Adults with complicated intra-abdominal infections

Designation of the therapy	Annual treatment costs/ patient
Medicinal product to be assessed:	
Ceftolozane/ tazobactam	€ 2,177.70 - € 5,444.25

Costs after deduction of statutory rebates (LAUER-TAXE®) as last revised: 15 October 2022)

b) Adults with acute pyelonephritis

c) Adults with complicated urinary tract infection

Designation of the therapy	Annual treatment costs/ patient
Medicinal product to be assessed:	
Ceftolozane/ tazobactam	€ 3,266.55

Costs after deduction of statutory rebates (LAUER-TAXE®) as last revised: 15 October 2022)

d) Adults with hospital-acquired pneumonia, including ventilator-associated pneumonia

Designation of the therapy	Annual treatment costs/ patient
Medicinal product to be assessed:	
Ceftolozane/ tazobactam	€ 5,444.25 - € 9,799.65

Costs after deduction of statutory rebates (LAUER-TAXE®) as last revised: 15 October 2022)

Costs for additionally required SHI services: not applicable

Other SHI services:

Designation of the therapy	Type of service	Costs/ unit	Number/ treatment day	Number/ patient/ year	Costs/ patient/ year
Ceftolozane/ tazobactam	Surcharge for the preparation of an infusion solution containing antibiotics and virustatics	€ 39	3	12 – 42	€ 468 – € 1,638