

# Monobactams

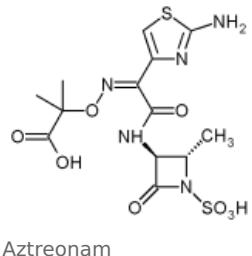
Monobactams are newer beta-lactam antibiotics. Aztreonam is the only agent used in clinical practice.

## Antimicrobial spectrum

Unlike other broad-spectrum beta-lactams, they only have an effect on **aerobic G- bacteria**, including some enterobacteria and *Pseudomonas aeruginosa*. Relatively resistant to beta-lactamases.

## Pharmacokinetics

They are poorly absorbed after oral administration, therefore it is administered parenterally (inhalation form). They penetrate the tissues relatively well, except for cerebrospinal fluid. They are excreted by the kidneys.



Aztreonam

## Side effects

Consistent with other beta-lactams (allergic skin reactions, GIT disorders). They increase the risk of superinfection especially with G + bacteria (staphylococci, enterococci). It is not nephrotoxic.

## Indications

Initial treatment of **sepsis** and **abdominal infections**. Suppressive treatment of chronic lung infections caused by *Pseudomonas aeruginosa*. It is used as a variant of aminoglycosides, but aztreonam must be supplemented with antibiotics effective against staphylococci.

## Sources

### Related articles

- Antibiotics
- Beta-lactam antibiotics
- Penicillins
- Cephalosporins
- Carbapenems

### Bibliography

- LINCOVÁ, Dagmar – FARGHALI, Hassan. *Základní a aplikovaná farmakologie*. 2. edition. Praha : Galén, 2007. ISBN 978-80-7262-373-0.
- ŠVIHOVEC, Jan. *Farmakologie*. 1. edition. Praha. 2018. ISBN 978-80-271-2150-2.