

# Glycylcyclins

Template:Infobox - medicine Glycylcyclines represent a new group of antibiotics that is derived from the tetracycline antibiotic minocycline. The main representative is **tigecycline**'. Tigecycline is a broad-spectrum ATB (effective against Gram-negative, Gram-positive and anaerobic microbes, but not effective against pseudomonads and proteus). Tigecycline is chemically a *9-t-butylglycylamido derivative of minocycline*.

## Indication

They are indicated for complicated skin and soft tissue infections as well as intra-abdominal infections.

## Mechanism of action

Their mechanism of action is: inhibition of proteosynthesis, (blocking of translation of protein in bacteria by binding to the **ribosomal subunit 30S**', blocks the entry of aminoacyl-tRNA molecules into the A site of the ribosome ).

## Antimicrobial spectrum

It is a **broad-spectrum antibiotic**' that acts on many clinically important bacteria. Both gram-positive, gram-negative, anaerobic and atypical, including some multi-resistant, penicillin resistant *Streptococcus pneumoniae*, *Klebsiella pneumoniae* and *Escherichia coli* , *Staphylococcus aureus*, from gram-negative bacteria shows a lower sensitivity to *Pseudomonas aeruginosa*, *Proteus mirabilis*, *Burkholderia cepacia* and *Stenotrophomonas maltophilia*.

## Side effects

Side effects are:

- nausea,
- vomiting,
- diarrhea.

## Links

## Related Articles

- Antibiotic to treat staphylococcal infection
- Tetracycline antibiotics
- Antibiotic resistance

## References

- VOJTOVÁ, Vladimír – URBANEK, Karel. Glycylcyclins - A new group of antibiotics. *Klin Farmakol Farm* [online]. 2008, y. 3, vol. 22, p. 113-115, Available from <<http://www.solen.cz/pdfs/far/2008/03/06.pdf>>. ISSN 1803-5353.

Template:Navbox - ATB

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