

Azithromylin (Azalid) / Makrolide

Herstellerangaben: „Infektionen der unteren und oberen Atemwege; Bronchitis, leichte bis mittelschwere ambulant erworbene Pneumonie; Sinusitis, Pharyngitis/Tonsillitis. Akute Otitis media. **Leichte bis mittelschwere Infektionen der Haut und des Weichteilgewebes;** Folliculitis, Zellulitis, Erysipelas. Unkomplizierte, durch Chlamydia trachomatis verursachte Urethritis und Zervicitis“.

Wikipedia: „Weiterhin wird Azithromycin bei akuten Mittelohrentzündungen, Haut- und Wundinfektionen, [Lyme-Borreliose](#), bakterieller Konjunktivitis, bei Urethritis durch [Chlamydien](#) und zur Prophylaxe sogenannter [MAK-Infektion](#) (Mycobacterium-avium-intrazelluläre-Komplex-Infektion) bei immungeschwächten Patienten verwendet“. <http://de.wikipedia.org/wiki/Azithromycin>

Product Information: "infections of the lower and upper respiratory tract; bronchitis, mild to moderate community-acquired pneumonia, sinusitis, pharyngitis / tonsillitis. Acute otitis media. Mild to moderately severe infections of the skin and soft tissue; folliculitis, cellulitis, erysipelas. Uncomplicated urethritis and cervicitis, caused by Chlamydia trachomatis".

Wikipedia: "Furthermore, azithromycin is used in acute middle ear infections, skin and wound infections, Lyme disease, bacterial conjunctivitis, with urethritis due to chlamydia and for the prevention of so-called MAC infection (Mycobacterium avium-intracellular complex infection) in immunocompromised patients."
<http://de.wikipedia.org/wiki/Azithromycin>

Beachte:

Long QT syndrome: http://en.wikipedia.org/wiki/Long_QT_syndrome

QTc-Zeit (BAZETT): <http://www.dr-gawlitza.de/qtc.htm>

Hypokaliämie und Hypomagnesiämie ausschließen bzw. vermeiden!

Keine Kombination von Azithromycin mit Fluconazol oder Chinolonen (z.B. Ciprofloxacin, Levofloxacin) oder Psychopharmaka oder Antikoagulantien oder Sartanen oder mit anderen Makroliden (z.B. Chlorithromycin), oder Chinidin, Procainamid, Klasse 3-Antiarrhythmika wie Defetilid, Amiodaron, Sotalol und Dauerbehandlung mit Saluretika (z.B. Lasix®)!

Keine Verordnung von Azithromycin bei Bradycardie, Hypokaliämie, Hypomagnesiämie, iatrogenen Hyponatriämie (z.B. Behandlung mit Saluretika), bei Neugeborenen und in den beiden ersten Wochen nach der Schwangerschaft (evtl. Pylorusstenose des Neugeborenen), allogener HSZT zur Behandlung hämatologischer Malignome.

No combination of azithromycin with fluconazole or quinolones (eg, ciprofloxacin, levofloxacin) or psychotropic drugs or anticoagulants or Sartanes or with other macrolides (eg Chlorithromycin), or quinidine, procainamide, class 3 antiarrhythmic drugs as defetilid, amiodarone, sotalol, and duration of treatment with diuretics (eg Lasix ®)!

No prescription of azithromycin in bradycardia, hypokalemia, hypomagnesemia, iatrogenic hyponatremia (eg, treatment with diuretics), in newborns and in the first two weeks after termination of pregnancy (possibly pyloric stenosis in the newborn), allogene HSZT for treatment of hematologic malignoms.

Occasional Neurotoxicity

Antimicrobial Class	Most Common Presentation of Neurotoxicity	Risk Factors	Proposed Mechanism	Note to Clinician
Macrolides Most common: clarithromycin, erythromycin	Acute psychosis Delirium Mania	Age Cytochrome P450 3A4 substrates	Interactions with GABA and glutamate Change in cortisol and prostaglandin metabolism Cytochrome P450 drug interactions	Case reports of azithromycin-associated delirium in elderly patients; however, clarithromycin and erythromycin are more common offenders

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Mattappalil A, Mergenhagen KA (2014) Neurotoxicity with antimicrobials in the elderly: a review. *Clin Ther.* 36, 1489-1503. [Abstract](#)

Source of literature:

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“Conclusions: Azithromycin use was not associated with an increased risk of death from cardiovascular causes in a general population of young and middle-aged adults”.
„Kommentar: Kardiovaskuläre Risiken s.o. und kardiovaskuläre Patienten von der Behandlung mit Azithromycin ausschließen und das Restrisiko gegen den klinischen Nutzen der Behandlung mit Azithromycin gewichten“.

Mantelli F, et al. (2013) Topical azithromycin as a novel treatment for **ocular rosacea**. Ocul Immunol Inflamm. 21(5), 371-7. doi: 10.3109/09273948.2013.801991. Epub 2013 Jul 22. <http://www.ncbi.nlm.nih.gov/m/pubmed/23875944/>
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“Azithromycin is a macrolide antibiotic which inhibits bacterial protein synthesis, quorum-sensing and reduces the formation of biofilm.... Long-term administration of azithromycin must be balanced against the potential for increased bacterial resistance. Azithromycin has a very good record of safety, but recent reports indicate rare cases of cardiac torsades des pointes in patients at risk.”

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“Conclusions and Relevance: Among older patients hospitalized with pneumonia, treatment that included azithromycin compared with other antibiotics was associated with a lower risk of 90-day mortality and a smaller increased risk of myocardial infarction. These findings are consistent with a net benefit associated with azithromycin use.”

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„Die Autoren stellten fest, dass die Aussagekraft der Ergebnisse durch die frühzeitige Beendigung der Studie und andere Faktoren eingeschränkt sei. Sie folgerten, dass eine potenzielle Gesundheitsschädigung durch Rezidive weiter untersucht werden müsse“.

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Carbomycin

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„Daptomycin, clofazimine, carbomycin and some cephalosporin antibiotics (such as cefoperazone, cephalothin, cefotiam and cefuroxime) had among the highest activities against stationary-phase B. burgdorferi persisters. Doxycycline, amoxicillin, penicillin G, macrolide antibiotics, azithromycin and clarithromycin had relatively poor activity against B. burgdorferi persisters. Interestingly, we observed that tetracycline had higher activity against stationary-phase B. burgdorferi persisters than doxycycline. Here, we observed that clofazimine was highly active against stationary-phase B. burgdorferi persisters (Figure 3F), although the MIC of clofazimine was relatively high (6.25 mg/mL). The preferential activity of clofazimine against B. burgdorferi persisters may be due to its high lipophilicity and its effects on the membrane.“

➔ Carbomycin, as a macrolide, a stronger 50s inhibitor

“Carbomycin A has made a special feature: it seems as if carbomycin A enters into a so-called covalent bond with the ribosome ... Thus carbomycin A would bind much stronger and much less reversible to the ribosome ...”

<http://riboworld.com/antib/50santib.php> [compared to the other macrolides, such as Acithromycin]

➔ Antibiotika Übersicht Carbomycin Blatt 21

[http://www.uni-saarland.de/fak8/mediziner/KlinischesSeminar/Thema%203 Antibiotika.pdf](http://www.uni-saarland.de/fak8/mediziner/KlinischesSeminar/Thema%203%20Antibiotika.pdf)

Bernt - Dieter Huismans, Letzte Revision November 2019 www.Huismans.click



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