

Clarithromycin:

Class: Antibiotic.

Indications:

Pharyngitis/tonsillitis due to susceptible *S. pyogenes*

Acute maxillary sinusitis due to susceptible *H. influenzae*, *M. catarrhalis*, or *S. pneumoniae*

Acute exacerbation of chronic bronchitis due to susceptible *H. influenzae*, *H. parainfluenzae*, *M. catarrhalis*, *Mycoplasma pneumoniae*, or *S. pneumoniae*

Community-acquired pneumonia due to susceptible *H. influenzae*, *H. parainfluenzae*, *M. catarrhalis*, *Mycoplasma pneumoniae*, *S. pneumoniae*, or *Chlamydia pneumoniae* (TWAR)

Uncomplicated skin/skin structure infections due to susceptible *S. aureus*, *S. pyogenes*

Disseminated mycobacterial infections due to *M. avium* or *M. intracellulare*

Prevention of disseminated mycobacterial infections due to *M. avium* complex (MAC) disease (eg, patients with advanced HIV infection)

Duodenal ulcer disease due to *H. pylori* in regimens with other drugs including amoxicillin and lansoprazole or omeprazole, or in combination with omeprazole or ranitidine bismuth citrate (no longer marketed in the U.S.). **Note:** Regimens that contain clarithromycin as the single antimicrobial agent are more likely to be associated with the development of clarithromycin resistance.

Available dosage form in the hospital: 125MG/5ML SUSP, 250MG TAB, 500MG INJECTION, 500MG TAB.

Trade Names:

Dosage:

-Usual dosage range: Oral: 250-500 mg every 12 hours or 1000 mg (two 500 mg extended release tablets) once daily for 7-14 days

-Acute exacerbation of chronic bronchitis: Oral:

-*M. catarrhalis* and *S. pneumoniae*: 250 mg every 12 hours for 7-14 days **or** 1000 mg (two 500 mg extended release tablets) once daily for 7 days

-*H. influenzae*: 500 mg every 12 hours for 7-14 days **or** 1000 mg (two 500 mg extended release tablets) once daily for 7 days

-*H. parainfluenzae*: 500 mg every 12 hours for 7 days **or** 1000 mg (two 500 mg extended release tablets) once daily for 7 days

- Acute maxillary sinusitis: Oral: 500 mg every 12 hours or 1000 mg (two 500 mg extended release tablets) once daily for 14 days
- Mycobacterial infection (prevention and treatment): Oral: 500 mg twice daily (use with other antimycobacterial drugs, eg, ethambutol or rifampin)
- Peptic ulcer disease: Eradication of *Helicobacter pylori*: Dual or triple combination regimens with bismuth subsalicylate, amoxicillin, an H₂-receptor antagonist, or proton-pump inhibitor: 500 mg every 8-12 hours for 10-14 days
- Pertussis (unlabeled use; CDC, 2005): Oral: 500 mg twice daily for 7 days
- Pharyngitis, tonsillitis: Oral: 250 mg every 12 hours for 10 days. **Note:** Recommended by the Infectious Disease Society of America (IDSA) as an alternative agent for group A streptococcal pharyngitis in penicillin-allergic patients (Shulman, 2012).
- Pneumonia: Oral:
 - C. pneumoniae*, *M. pneumoniae*, and *S. pneumoniae*: 250 mg every 12 hours for 7-14 days **or** 1000 mg (two 500 mg extended release tablets) once daily for 7 days
 - H. influenzae*: 250 mg every 12 hours for 7 days **or** 1000 mg (two 500 mg extended release tablets) once daily for 7 days
 - H. parainfluenzae* and *M. catarrhalis*: 1000 mg (two 500 mg extended release tablets) once daily for 7 days
- Prophylaxis against infective endocarditis (unlabeled use): Oral: 500 mg 30-60 minutes prior to procedure. **Note:** American Heart Association (AHA) guidelines now recommend prophylaxis only in patients undergoing invasive procedures and in whom underlying cardiac conditions may predispose to a higher risk of adverse outcomes should infection occur. As of April 2007, routine prophylaxis for GI/GU procedures is no longer recommended by the AHA.
- Skin and skin structure infection, uncomplicated: Oral: 250 mg every 12 hours for 7-14 days

Renal Impairment:

- Cl_{cr} <30 mL/minute: Decrease clarithromycin dose by 50%
- Hemodialysis: Administer after HD session is completed (Aronoff, 2007).
- In combination with atazanavir or ritonavir:
 - Cl_{cr} 30-60 mL/minute: Decrease clarithromycin dose by 50%.
 - Cl_{cr} <30 mL/minute: Decrease clarithromycin dose by 75%.

Common side effect: Headache , Rash , Abnormal taste , diarrhea , vomiting ,nausea , abdominal pain , dyspepsia .

Pregnancy Risk Factor: C