

## ORAL ANTIBIOTICS FOR ACUTE COPD EXACERBATIONS

Drug Trade names	Supplied	Suggested Dosing	Covered by ODB? Approximate Cost
<b>Penicillins, combinations</b>			
<b>Amoxicillin</b>  <i>Amoxil, Various generics</i>	500 mg capsules	1000 mg TID PO for 5-7 days  Dosage adjustment may be required for renal impairment:  <b>eGFR 10-30:</b> 1000 mg every 12 hours for 5-7 days  <b>eGFR &lt; 10:</b> 500 mg every 12 hours for 5-7 days	YES ( <i>generics</i> )  \$0.13-\$0.015 per cap
<b>Amoxicillin/ Clavulanate</b>  <i>Clavulin, various generics</i>	500/125 mg tab 875/125 mg tab	875/125 mg BID for 5-10 days  Dosage adjustment may be required for renal impairment  <b>eGFR 10-30:</b> 500/125 mg every 12 hours for 5-10 days  <b>eGFR &lt; 10:</b> 250/125 mg every 12-24 hours for 5-10 days	YES – brand names covered with valid no substitution  \$0.56-\$0.88 per tab
<b>Potential Adverse Effects:</b> Rash, anaphylaxis (rare), nausea, vomiting, diarrhea			
<b>Sulfonamide Combinations</b>			
<b>Sulfamethoxazole/ Trimethoprim</b>  <i>Septra, Septra DS, Bactrim, Bactrim DS, various generics</i>	400/80 mg tab 800/160 mg tab	800/160 mg BID for 5-7 days  Dosage adjustment may be required for renal impairment:  <b>eGFR 15-30:</b> 50% of usual dose <b>eGFR &lt; 15:</b> 25-50% of usual dose	YES ( <i>generics only</i> )  \$0.11-\$0.18 per tab
<b>Potential Adverse Effects:</b> Nausea, skin rash, Stevens-Johnson syndrome (rare), increased potassium, increased serum creatinine.			

<b>Tetracyclines</b>			
<b>Doxycycline</b> <i>Various generics</i>	100 mg tab	200 mg for the first dose, then 100 mg BID for 5-7 days	YES  \$0.59-\$0.68 per tab
<b>Potential Adverse Effects:</b> GI upset, photosensitivity			
<b>Cephalosporins</b>			
<b>Cefuroxime</b> <i>Ceftin, various generics</i>	250 mg tab 500 mg tab	500 mg BID for 5-10 days  Dosage adjustment may be required for renal impairment:  <b>eGFR 10-30:</b> 250 mg every 12 hours for 5-10 days <b>eGFR &lt;10:</b> 250 mg OD for 5-10 days	YES – brand names covered with valid no substitution  \$0.72-1.64 per tab
<b>Potential Adverse Effects:</b> GI intolerance, anaphylaxis (rare), rash			
<b>Fluoroquinolones</b>			
<b>Ciprofloxacin</b> <i>Cipro, Cipro XL, various generics</i>	250 mg tab 500 mg tab 750 mg tab 1000 mg tab	For patients at risk of <i>pseudomonas aeruginosa</i> :  500—750 mg BID PO for 7-21 days  Dosage adjustment may be required for renal impairment:  eGFR 30-50: 250-500 mg q12h eGFR <30: 500 mg q24h	YES – brand names covered with valid no substitution or LU code 394 ( <i>Cipro XL</i> )  \$0.45-\$3.00 per tab
<b>Levofloxacin</b> <i>Levaquin, various generics</i>	250 mg tab 500 mg tab 750 mg tab	750 mg OD PO for 5 days  Alternative: 500 mg OD PO for 7 days  Dosage adjustment may be required for renal impairment:  eGFR 20-50: 750 mg q48h eGFR <20: 750 mg as first dose, then 500 mg q48h	YES (generics) NO (brand, 750 mg tabs)  \$1-\$8 per tab

<b>Moxifloxacin</b> <i>Avelox, various generics</i>	400 mg tab	400 mg OD PO for 5 days	YES – brand names covered with valid no substitution \$1-\$2 per tab
<b>Potenital Adverse Effects:</b> Headache, dizziness, peripheral neuropathy, tendon rupture (rare), QTc prolongation, liver injury, liver failure (rare), may worsen symptoms of myasthenia gravis and should not be used in this population.			
<b>Extended Spectrum Macrolides</b>			
<b>Azithromycin</b> <i>Zithromax, various generics</i>	250 mg tab	500 mg OD PO for 3 days <b>Alternative:</b> 500 mg PO for 1 day then 250 mg OD PO for 4 days	YES – brand names covered with valid no substitution \$0.90-\$1.10 per tab
<b>Clarithromycin</b> <i>Biaxin, Biaxin BID, Biaxin XL, various generics</i>	250 mg 500 mg tab 500 mg extended release (ER) tabs	500 mg BID for 5-10 days <b>ER tabs:</b> 1000 mg for 5-10 days  Dosage adjustment may be required for renal impairment:  <b>eGFR &lt; 30:</b> 250 mg BID or 500 mg OD (immediate release); 500 mg OD (extended release)	YES – brand names covered with valid no substitution \$0.40-\$3.00 per tab
<b>Potential Adverse Effects:</b> Bitter taste, GI intolerance, nausea, diarrhea, QTc prolongation.			

#### REFERENCES:

Prescribe Smart: the Modern Drug Formulary. 2019. Accessed from: <https://www.prescribessmart.com/>. Accessed on 25-Mar-2022.

Mclvor RA. "Drug Tables: Chronic Obstructive Pulmonary Disease". *Compendium of Pharmaceuticals and Specialites (CPS) Online Version*, Canadian Pharmacists Association (CPhA). 2021. Accessed from: <https://www-e-therapeutics-ca.libaccess.lib.mcmaster.ca/search#>. Accessed on: 25-Mar-2022.