## Appendix B: Antibiotic Treatment Recommendations for Acute Exacerbations of COPD (AECOPD)

### CATEGORY RECOMMENDED EMPIRIC THERAPY (ALPHABETICAL ORDER) NOTES

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| < 4 exacerbations/year and at least 2 of the following: | **First line agents:**  
amoxicillin  
1 g PO TID  
or  
doxycycline  
200 mg PO once, then 100 mg PO BID  
or  
sulfamethoxazole-trimethoprim  
1 DS (800-160 mg) tablet PO BID | Treat for 5 to 7 days. Evidence indicates that 5 days of treatment may be as effective as 7 to 10 days.  
Failure of first line agents: see below |
| ≥ 4 exacerbations/year and at least 2 of the following: | **First line agents:**  
amoxicillin-clavulanate  
875-125 mg PO BID for 5 to 10 days  
or  
cefuroxime axetil  
500 to 1000 mg PO BID for 5 to 10 days  
or  
levofloxacin³  
750 mg PO once daily for 5 days | 1. Failure of first line agents: no improvement in symptoms following completion of antibiotic therapy OR clinical deterioration after 72 hours of antibiotic therapy.  
2. Use a different antibiotic class than was used previously.  
3. Due to the broad spectrum of levofloxacin, potential for increasing resistance and risk of *C. difficile* infection, reserve this medication for beta-lactam allergies or failure to first line antibiotic therapy.  
4. Macrolides have poor *Haemophilus* coverage and significant *S. pneumoniae* resistance. The benefit of macrolides may be due more to anti-inflammatory properties than to antibacterial activity.  
**Alternatives:**  
azithromycin⁴  
500 mg PO once daily for 3 days  
or  
clarithromycin⁴  
500 mg PO BID or 1000 mg extended-release (XL) PO once daily for 5 to 10 days |

### References