

Supplementary 1:

Quick reference guide for azithromycin

Identify if suitable for Azithromycin therapy

Identify Contra-indications to macrolide therapy

Perform safety checks before starting therapy Specialist

Start Azithromycin therapy Specialist

Monitoring during therapy

Review therapy at 6-12 months

Specialist or GP, dependent on patient's clinical condition

Decide if suitable for ongoing therapy

| Asthma | COPD | Bronchiectasis |
|--|--|---|
| <p>Confirmed diagnosis of asthma Symptomatic despite >800mcg/BED At least 1 exacerbation in previous 12 months Inhaled therapies optimised including inhaler technique and adherence review</p> | <p>Confirmed diagnosis of COPD 3 or more exacerbations in previous 12 months AND 1 or more severe exacerbation with hospitalisation/morbidity Inhaled therapies optimised including inhaler technique and adherence review, smoking cessation and pulmonary rehabilitation completed</p> | <p>Confirmed diagnosis of bronchiectasis 3 or more exacerbations in previous 12 months Optimisation of other interventions such as airway clearance and pulmonary rehabilitation</p> |
| <p>Absolute Contra-indication: Previous allergy/intolerance to macrolides History of prolonged QTc Active NTM disease</p> | | <p>Relative Contra-indications: Hearing or balance problems History of NTM disease Abnormal liver function tests</p> |
| <p>Baseline ECG— If QTc prolonged (>450msec for men, >470msec for women) do not give macrolide Baseline liver function tests</p> <p>Standard sputum for baseline culture if able to expectorate If bronchiectatic or clinical concern of NTM infection investigate to exclude (following BTS guideline on NTM disease).</p> <p>Review concomitant medications for potential interactions</p> | | |
| <p>Azithromycin (250mg/500mg) thrice weekly Plan to treat for 6-12 months Warn of potential side effects</p> | <p>Azithromycin 500mg thrice weekly or 250mg daily Plan to treat for 6-12 months Warn of potential side effects</p> | <p>Azithromycin 500mg thrice weekly or 250mg daily Plan to treat for 6-12 months Warn of potential side effects</p> |
| <p>Specialist continue to prescribe until LFTs and ECG at 1 month reviewed as normal, and then request GP to prescribe</p> | | |
| <p>Liver function tests at 1 month and every 6 months Repeat ECG at 1 month—if QTc prolonged (>450msec for men, >470msec for women) stop macrolide</p> | <p>Enquire about side effects, especially GI upset and hearing and balance problems Standard sputum for culture at review if able to expectorate</p> | <p>Medication review for potential drug interactions and QT prolongation</p> |
| <p>Specialist: Monitor LFTs and ECG at 1 month then GP monitor LFTs every 6 months</p> | | |
| <p>Objective evidence of improvement: Reduction in exacerbation rate Improvement in symptoms Change in sputum microbiology including NTM growth Medication review for potential interactions</p> | <p>Objective evidence of improvement: Reduction in exacerbation rate Improvement in symptoms, QoL or CAT score Change in sputum microbiology including NTM growth Medication review for potential interactions</p> | <p>Objective evidence of improvement: Reduction in exacerbation rate Improvement in symptoms, QoL Change in sputum microbiology including NTM growth Medication review for potential interactions</p> |
| <p>Specialist or GP, dependent on patient's clinical condition</p> | | |
| <p>Perform individual risk/benefit analysis</p> | <p>If therapy continued ensure ongoing monitoring and annual review of therapy</p> | <p>Consider treatment break for 3-6 months each year to reduce treatment burden (and possibly reduce microbiological resistance)</p> |