

Supplementary 1:
Quick reference guide for
azithromycin

Asthma

COPD

Bronchiectasis

Identify if suitable for Azithromycin therapy

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

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

Confirmed diagnosis of bronchiectasis
3 or more exacerbations in previous 12 months
Optimisation of other interventions such as airway clearance and pulmonary rehabilitation

Identify Contra-indications to macrolide therapy

Absolute Contra-indication:
Previous allergy/intolerance to macrolides
History of prolonged QTc
Active NTM disease

Relative Contra-indications:
Hearing or balance problems
History of NTM disease
Abnormal liver function tests

Perform safety checks before starting therapy

Baseline ECG—
If QTc prolonged (>450msec for men, >470msec for women) do not give macrolide
Baseline liver function tests

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).

Review concomitant medications for potential interactions

Start Azithromycin therapy

Azithromycin (250mg/500mg) thrice weekly
Plan to treat for 6-12 months
Warn of potential side effects

Azithromycin 500mg thrice weekly or 250mg daily
Plan to treat for 6-12 months
Warn of potential side effects

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Monitoring during therapy

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

Enquire about side effects, especially GI upset and hearing and balance problems
Standard sputum for culture at review if able to expectorate

Medication review for potential drug interactions and QT prolongation

Review therapy at 6-12 months

Objective evidence of improvement:
Reduction in exacerbation rate
Improvement in symptoms
Change in sputum microbiology including NTM growth
Medication review for potential interactions

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

Objective evidence of improvement:
Reduction in exacerbation rate
Improvement in symptoms, QoL
Change in sputum microbiology including NTM growth
Medication review for potential interactions

Decide if suitable for ongoing therapy

Perform individual risk/benefit analysis

If therapy continued ensure ongoing monitoring and annual review of therapy

Consider treatment break for 3-6 months each year to reduce treatment burden (and possibly reduce microbiological resistance)