

## Supplementary 1:

Quick reference guide for  
azithromycin

**Identify if suitable for  
Azithromycin therapy**

## Asthma

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

## COPD

Confirmed diagnosis of COPD  
3 or more exacerbations in previous 12 months OR  
1 or more severe exacerbation with hospitalisation/morbidity  
Inhaled therapies optimised including inhaler technique and adherence review, smoking cessation and pulmonary rehabilitation completed

## Bronchiectasis

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  
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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)