

CF Guidelines - Oral Antimicrobials

Oral Antimicrobials:

Below is a table showing a list of Oral Antimicrobials to be used in patients with CF. The following table contains the name of the drug to be prescribed, the dose to be used for both paediatric and adult patients. The indications each drug will treat and any significant information including some but not all of the possible side effects.

Drug	Dose	Indication	Notes / Side Effects
Amoxicillin	P<1: 125mg tds P1-7: 250mg tds P7-16: 500mg tds A: 1g tds or 3g bd	H.Influenzae	SE: Rashes and loose stools 20% H.Influenzae are resistant
Azithromycin	P: 10mg/kg A<50kg: 250mg od A>50kg: 500mg od (For chronic Ps.A use for 3/7 at dose above.)	M.abscessus, S.Aureus, H.Influenzae - both develop resistance when used long term - and Chronic Ps.A	Check sputum AFB before long term use. Usually well tolerated but potential for hepato and ototoxicity. Monitor LFTs. Beware drug interactions – see BNF. Discontinue Flucloxacillin unless macrolide resistant Staph. Then treat with both.
Cefaclor	P<1yr: 125mg tds P1-5yr: 250mg tds P5-12yr: 500mg tds A: 500mg bd (max 4g/24hrs) Distaclor MR 750mg bd	S.Aureus, H.Influenzae	1/12 course. Distaclor MR is slow release formulation which allows bd dosing. Has significantly better anti-staph activity than cefixime.
Chloramphenicol	P: 12.5 25mg/kg A: upto 1g qds	Burkholderia, Stenotrophomonas, M.R.Ps.A	SE: BM suppression. Check FBC alt days. Expensive.
Ciprofloxacin	P: 20mg/kg bd A: 750mg bd (some centres push to 1g bd)	Sensitive Ps.A	C/I in patients with joint disease. Beware drug interactions – see BNF Photosensitivity is common - In summer sunblock should be used for 4/52 post Rx.
Clarithromycin	P<8kg: 7.5mg/kg bd P1-2: 62.5mg bd P3-6: 125mg bd P10-16: 250mg bd A: 500mg bd	S.Aureus, H.Influenzae, Chronic Ps.A if azithromycin not tolerated.	Beware drug interactions – see BNF. Suitable when erythromycin is not tolerated. Cheaper alternative to azithromycin (but potentially less immunomodulatory activity)
Clindamycin	P: 4-7mg/kg qds A: 600mg qds	M.R.S.A Anaerobes	Rarely causes pseudo-membranous colitis – stop drug and seek medical advice if any diarrhoea.
Co-trimoxazole	P6mth-5yr: 240mg bd P6-12yr: 480mg bd A: 960mg bd	Burkholderia, Stenotrophomonas	Dose may be increased 50% in severe infection.
Doxycycline	P>12yr: 200mg day 1 then 100mg od A: 200mg day 1 then 100mg od	H.influenzae, Burkholderia, Stenotrophomonas, M.R.S.A	SE: Patients MUST be >12yr (teeth) photosensitivity.
Erythromycin	P<2yr: 250mg bd P2-8yr: 500mg bd P8-16yr: 1g bd A: 1g QDS		Beware drug interactions – see BNF. Drug interactions are more significant for erythromycin > clarithromycin > azithromycin.
Flucloxacillin	P: 50-100mg/kg/day in 3-4 divided doses A: 1g qds (1g bd prophylaxis)	S.Aureus. If S.Aureus is a troublesome regular problem can use up to 2g tds.	Give before meals. Liquid tastes awful. Continue long-term dose as prophylaxis during childhood. Less evidence of benefit in adults. Stop if M.R.S.A isolated.
Linezolid	P<11yr: 10mg/tds P12-16yr: 600mg bd A: 600mg bd	2nd line M.abscessus, M.R.S.A	Many side effects and drug interactions – see BNF. Risk of serotonin syndrome with SSRI antidepressants (which may be hard to distinguish from sepsis.)

Minocycline	A: 100mg od	Burkholderia, Stenotrophomonas, 2nd line M.abcessus	Broader spectrum than doxycycline, but more SE. Patients MUST be >12yr (teeth) SE: Dizziness, pigmentation, hepatotoxicity Photosensitivity.
Moxifloxacin	A: 400mg od	N.T.M, Not Ps.A	SE: tendonitis, risk of life-threatening liverreactions (avoid unless no other antibiotic option). Relative C/I in CF patients with joint disease. Better activity against gram+ve bacteria than ciprofloxacin.
Rifabutin	A: 300mg od	M.avium intracellulare	Better in vitro activity against MAI than rifampicin, may be better tolerated as lower dose used (but more expensive and potentially more frequent leucopenia.)
Rifampicin	P: 10mg/kg bd max 600mg A: 600mg bd (M.R.S.A) 600mg od (N.T.M)	M.R.S.A, N.T.M	Use in combination with a second antibiotic to prevent development of resistance. Monitor liver function in prolonged courses. Take beforebreakfast.
Sodium Fusidate	P1-5yr: 250mg tds P5-12yr: 500mg tds P12-16yr: 750mg tds A: 500-750mg tds	S.Aureus, M.R.S.A	Use with Flucloxacillin or another antibiotic as antibiotic resistance develops rapidly. Avoid in liver disease.

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