



Other respiratory treatments

Aminophylline	IV	Load: 5mg/kg (max 500mg) over at least 20 minutes, then – IV infusion: <12 years: 1mg/kg/hour >12 years: 0.5 – 0.7mg/kg/hour	Consultant decision	Do not use loading dose if already receiving oral theophylline or aminophylline. Measure levels 4-6 hours after starting infusion, and daily thereafter. Do not exceed 20mg/l. Care needed as interacts with some drugs e.g. clarithromycin, erythromycin, fluconazole, ciprofloxacin — check BNFc
Azithromycin (see 11.1a & 11.1b for standard antibiotic doses)	Oral	<15kg: 10mg/kg od 3/week 15-40 kg: 250 mg od 3/week >40kg: 500 mg od 3/week Mon/Wed/Fri	Potential long-term treatment as anti-inflammatory. Consultant decision	Potential for hepato- and ototoxicity but usually very well tolerated. Avoid long term concurrent use with erythromycin
DNase (Dornase alpha) Homecare delivery	Nebulised	2.5 mg once daily Consideration of alternate day after 6 months if well or treatment burden an issue.	In afternoon, usually at least 30 mins prephysiotherapy. See section 6.4 for more details of variation of timing.	Occasionally use twice daily – consultant decision.
Hypertonic saline 3 or 7%	Nebulised	4 mls up to twice a day Immediately before or during physiotherapy.	Pre-treat with bronchodilator. (see section 6.5).	
Ivacaftor	Oral	2 years and above : <14kg: 50mg granules bd	For children with one of the following gating	Doses should be taken morning and evening with

		≥14kg - <25kg: 75mg granules bd ≥25kg: 150mg tablet bd	mutations-G551D, G1244E, G1349D, G178R, G551S, S1251N, S1255P, S549N, S549R. -Liver function tests 3 monthly for 1st year then yearly (annual review)Sweat chloride 6-8 weeks after starting, at 6 months, then annuallyEye exams before starting then annually in <12 yr oldsStool elastase in 2-5 yr olds preand 6 months after	evening dose taken 2 – 3 hours before bedtime.
Mannitol	Inhaled	Initiation dose assessment: see details in Summary of Product Characteristics on www.medicines.org.uk Therapeutic dose regimen: 400mg (10 x 40mg capsules) bd via inhaler supplied Licensed for >18 years only	Starting. Consultant decision Not currently commissioned for use in children, and funding should be sought before initiation of treatment.	Doses should be taken morning and evening with evening dose taken 2 – 3 hours before bedtime.
N-acetylcysteine (NAC)	Oral	< 12 years: 300mg BD ≥12 years: 600mg BD	Given for the duration of the IV aminoglycoside course. For the prevention of ototoxicity in patients receiving IV aminoglycosides as part of NTM treatment and 3-monthly IV's only.	600mg tablets (unlicensed brand ACC® from Hexal) are scored and halve easily and for children unable to take a tablet they disperse in a small amount of water.