

Addendum for *Antibiotic Treatment for Cystic Fibrosis (2nd Edition CF Trust 2002)**

The TOPIC study– a large multicentre randomised controlled trial of once vs 3 times daily tobramycin for pulmonary exacerbations of CF - has recently been completed successfully¹. The TOPIC study allows definitive recommendations to be made on the dosing interval used for intravenous tobramycin in patients with cystic fibrosis.

- A once daily regimen is likely to be more convenient for most patients, however patients already on an individualised dosing regimen need not be changed.
- For children under 40 kg, a dose of tobramycin of 10 mg/kg is recommended, given as a 30 minute infusion in 30 ml of 0.9% saline.
- For adults over 40 kg who have previously received tobramycin on a 3 times daily regimen, the same total daily dose of tobramycin can be used, but given as a single infusion.
- For adult patients receiving tobramycin for the first time, the 10 mg/kg dose can be used but a maximum of dose 660 mg is recommended.
- Renal function should be performed before the 1st dose of tobramycin and again before the 8th dose. Trough tobramycin levels are measured before the 2nd and 8th doses of tobramycin.
- In some patients, whose strain of *Pseudomonas aeruginosa* shows intermediate sensitivity to tobramycin, a peak sample should also be sent 30 minutes after the end of a 30 minute infusion.
- Target levels : Trough level < 1 mg/L
 Peak level (where done) 20–30 mg/L

Reference

1. Smyth A, Tan K, Hyman-Taylor P, Mulheran M, Lewis S, Stableforth D, Knox A. A randomised controlled trial of once vs three times daily tobramycin for pulmonary exacerbations of cystic fibrosis. *Pediatr Pulmonol* 2003;suppl. 5:292.

*ISBN 0-9540536-6-4

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01/04

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The logo for the Cystic Fibrosis Trust, featuring a stylized 'CF' monogram to the left of the words 'CYSTIC FIBROSIS TRUST' stacked vertically in a bold, sans-serif font.