

A Review of Clinical and Microbiological Outcomes Following Treatment of Infections Involving Multidrug-resistant *Acinetobacter baumannii* with Tigecycline.

Gordon NC, Wareham DW

Division of Infection, Barts and The London NHS Trust, London, UK.

Objectives Multidrug-resistant *Acinetobacter baumannii* (MRAB) is an increasing problem in UK hospitals, with many strains now resistant to all available antibiotics except polymyxins. Tigecycline has been used for the treatment of MRAB as it demonstrates activity in vitro, but there are limited data on its clinical efficacy in Gram-negative infections, especially those involving the lower respiratory tract or bacteraemia. **Patients and methods** A retrospective study of the clinical and microbiological outcomes of all patients treated with tigecycline for MRAB over an 18 month period was undertaken.

Results Thirty-four patients received tigecycline for MRAB or polymicrobial infection involving MRAB. Twenty-three (68%) had a positive clinical outcome: microbiological clearance was demonstrated in 10 of these. The overall mortality was 41% (n = 14), with nine deaths directly attributable to sepsis. Three patients had episodes of Gram-negative bacteraemia while receiving treatment with tigecycline, with documented resistance occurring in one patient. Overall, the correlation between microbiological and clinical outcomes was poor.

Conclusions While tigecycline retains excellent in vitro activity against MRAB, its clinical efficacy remains uncertain. A prospective study, including the use of tigecycline in combination with other antimicrobial agents, should be undertaken to define its role in the treatment of MRAB.