INTRODUCTION

Acinetobacter baumannii is an important pathogen implicated in a number of hospital-acquired infections and is considered by the WHO and CDC to be a serious antimicrobial-resistant organism. Minocycline is highly active in vitro against Acinetobacter spp. with 72% of clinical isolates resistance to AMR, and 0.5 mg/mL MIC for Acinetobacter spp. was approved for the treatment of infections due to susceptible strains (1).

The current approved dosage regimen in the US is 200 mg twice daily. The purpose of this study was to determine the safety and pharmacokinetics of minocycline after single and multiple ascending doses of intravenous minocycline in healthy adult subjects.

METHODS

This was a two-blind, randomized, placebo-controlled, single- and multiple ascending dose study of up to 8 cohorts of different minocycline concentrations (Table 1). Each cohort consisted of 10 subjects (8 active drug and 2 placebo). Within each cohort, subjects received a single dose on Day 1, followed by the same dose on Day 4. After 7 days of twice-daily dosing (Days 4-10), followed by a single dose on Day 11.

RESULTS

No adverse events were reported.

CONCLUSION

A summary of pharmacokinetic parameters by cohort is found in Table 1. Maximum concentrations of minocycline were achieved at the end of the 1-hour intubation.

REFERENCES


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