Pharmacokinetic (PK) and Pharmacodynamic (PD) Analysis of Delafloxacin (DLX) against Community-Acquired Respiratory Tract Pathogens in Murine Lung Infection Models

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ABSTRACT

In this study, the pharmacokinetic (PK) and pharmacodynamic (PD) profiles of the fluoroquinolone, delafloxacin (DLX) were evaluated in murine lung infection models. Delafloxacin showed PK and PD profiles suitable for achieving efficacious drug exposure against MRSA and MSSA, with MICs of 0.008 and 0.002, respectively.

INTRODUCTION

The need for new, effective, and safe antimicrobial agents is highlighted by the increasing prevalence of resistance to existing antibiotics.

OBJECTIVES

- To compare the PK and PD profiles of delafloxacin against MRSA and MSSA in murine lung infection models.
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RESULTS

Delafloxacin showed PK and PD profiles suitable for achieving efficacious drug exposure against MRSA and MSSA, with MICs of 0.008 and 0.002, respectively.

CONCLUSIONS

Delafloxacin had suitable PK and PD profiles for achieving efficacious drug exposure against MRSA and MSSA, with MICs of 0.008 and 0.002, respectively. These findings support the clinical development of delafloxacin as a new therapeutic option for the treatment of respiratory tract infections caused by MRSA and MSSA.

REFERENCES

