Minocycline Activity against Stenotrophomonas maltophilia Isolated from Patients in US Hospitals

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Introduction
- Stenotrophomonas maltophilia has emerged as a common hospital-associated opportunistic pathogen isolated from immunocompromised and immunocompetent patients.
- S. maltophilia is intrinsically resistant to many common drug classes, including carbapenems, cephalosporins, and aminoglycosides.
- Four commonly used antibiotics with Clinical and Laboratory Standards Institute (CLSI) breakpoints for S. maltophilia were tested in this study: minocycline, ceftriaxone, levofloxacin, and trimethoprim-sulfamethoxazole.
- Trimethoprim-sulfamethoxazole is no longer available.
- Chloramphenicol is rarely used due to toxicity concerns.

Materials and Methods
- In this study, we evaluated susceptibilities of 983 S. maltophilia USA isolates collected as part of the SENTRY Antimicrobial Surveillance Program from US hospitals from 2014–2018.
- We also examined the frequency of S. maltophilia isolated from respiratory tract specimens in 9,120 patients hospitalized with pneumonia from 2014–2018.

Conclusions
- S. maltophilia was the most frequent cause of Gram-negative pathogens in hospitalized patients from US medical centers from 2014–2018.
- This study was supported by Melinta Therapeutics, Inc.

References

Acknowledgements
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IDWeek 2019; Poster at SRA
IDWeek 2019, October 2–6, 2019, Washington, DC

Figure 1 Gram-negative pathogens isolated from patients hospitalized with pneumonia

Figure 2 Infection types from which S. maltophilia was isolated

Figure 3 MIC distributions of minocycline and comparator antibacterials agents against S. maltophilia isolated from medical centers in the United States (2014–2018)

Table 1 Activities of minocycline and comparator antibacterials agents when tested against S. maltophilia isolates collected from medical centers in the United States (2014–2018)

Table 2 MIC distribution of minocycline and comparator antibacterials agents against S. maltophilia isolates collected from medical centers in the United States (2014–2018)

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Poster #1584
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