

*[P-427R] Has there been an increase in resistance to the fluoroquinolone antibiotics in the Tampa/St. Petersburg metropolitan area for Pseudomonas aeruginosa, Staphylococcus aureus, and Enterococcus species?*

*Kam, L. W., Krop, L. C., Coyner, P., Lumia, A., Wiggins, H., James A. Haley Veterans' Hospital, 13000 Bruce B. Downs Blvd., Dept. 119, Tampa, FL 33612, USA Internet: linda.kam@med.va.gov*

*Rationale: Fluoroquinolone use has increased dramatically over the last several years due to their favorable pharmacokinetic profiles, bioavailability, and side effect profiles. The use of this antibiotic class has been encouraged by Infectious Disease Society of America's Guidelines on the Management of Community Acquired Pneumonia, April 1998. Selective pressure is a concern with any class of antimicrobial agent that is widely used. Fluoroquinolone resistance has been reported nationally but has never been studied in our area. Objective: This study will demonstrate whether the increased use of fluoroquinolone antibiotics in the Tampa/St. Petersburg metropolitan area is associated with an increase in resistance of Pseudomonas aeruginosa, Staphylococcus aureus, and Enterococcus species to the fluoroquinolones as a class. Methods: An advisory panel was convened to review the susceptibilities of P. aeruginosa, S. aureus, and Enterococci species over the last 3 years (1997, 1998, 1999) at 5 large community and teaching hospitals in the Tampa/St.Petersburg metropolitan area. The panel was also asked to review the total fluoroquinolone expenditures for the same years to identify trends and to testify that increased resistance is related to increased use of fluoroquinolone antibiotics. Fluoroquinolones included in this study were levofloxacin, ofloxacin, and ciprofloxacin. Results: Research is in progress, but we anticipate that we will find a trend toward increased resistance to P. aeruginosa, S. aureus, and Enterococcus species as the fluoroquinolone usage has increased. Conclusion and implications: Research is in progress.*