

## **Technical Bulletin**

## Aerococcus Susceptibility to Antimicrobics

**TO:** Medical Staff and Clients

**FROM:** Dr. A. Christian Whelen, PhD, M.S., D(ABMM)

V.P. - Technical Director (Microbiology)

Terrie Koyamatsu, M(ASCP) Dr. Wesley Kim, MD Dr. Ana Ortega-Lopez, MD

Manager, DLS Microbiology Medical Director DLS Medical Director QMC Punchbowl,

and QMC West North Hawaii and Molokai

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SUBJECT: Predictable susceptibility of *Aerococcus* to antimicrobial agents

*Aerococcus* species including *A. urinae* and *A. sanguinicola* can be associated with human infections, particularly urinary tract infections. Susceptibility testing requires special conditions, so DLS Microbiology does not perform it locally. Although susceptibility testing for *Aerococcus* can be performed at a reference laboratory (total turn-around time is usually 3-4 days), susceptibility to several agents such as penicillins and vancomycin is predictable. Below are several references that we believe to be helpful.

- 1. Carkaci, et al, Open Microbiol J, 2017. Investigators tested 120 isolates with 6 agents by 3 methods for European breakpoints (EUCAST) and found **penicillin**, **cefotaxime**, **meropenem**, **vancomycin**, **linezolid**, **rifampacin all susceptible**.
- 2. Current Clinical Laboratory Standards Institute (CLSI) standards for in vitro testing outline interpretations for penicillin, cefotaxime, ceftriaxone, meropenem, vancomycin, linezolid, tetracycline, and emphasizes that susceptibility to trimethoprim/sulfamethoxazole, levofloxacin, and ciprofloxacin should be confirmed before using.
- 3. Rasmussen, Clin Microbiol Infect, 2016 and current digital Sanford Guide: Treatment options for uncomplicated UTI may include nitrofurantoin, fosfomycin (*A. urinae*), and first generation cephalosporin. **Aerococcus is inherently resistant to sulfamethoxazole**.
- 4. Skovetal, J Antimicrob Chemotherapy, 2001. Penicillins for uncomplicated UTI; Vancomycin or penicillin with gentamycin for severe cases.

The purpose of this bulletin is to provide additional resources, especially if specific susceptibilities are not available. It is NOT intended to be specific therapeutic advice because all cases are different and must be evaluated within the context of clinical presentation and other relevant information.

Please refer any questions to Terrie Koyamatsu, Manager - DLS Microbiology Laboratory at 589-5196, or DLS Client Services at 589-5101.