



Technical Bulletin

Aerococcus Susceptibility to Antimicrobics

TO: Medical Staff and Clients

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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 (turn-around time averages 7-14 days), susceptibility to beta-lactams 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. Clinical Laboratory Standards Institute (CLSI) M-45 3rd ed. (2016) document outlines interpretations for penicillin, cefotaxime, ceftriaxone, meropenem, vancomycin, ciprofloxacin, levofloxacin, trimethoprim-sulfamethoxazole (excluding *A. urinae*), and tetracycline. It states that *Aerococcus* species are usually susceptible to β -lactams and vancomycin. Resistance has been described to the fluoroquinolones, especially *A. sanguinicola* and *A. viridans*. Non-susceptibility to meropenem or vancomycin is rare and should be confirmed.
3. Current digital Sanford Guide. Penicillin/amoxicillin highly active. Primary regimens: Amoxicillin or nitrofurantoin. Alternate regimens: fosfomycin, or ciprofloxacin.
4. Skovet al, 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 Tori Enomoto, Manager - DLS Microbiology Laboratory at 808- 441-5470, or DLS Client Services at 808-589-5101.
