Sphingomonas spp (LTR58165)

Edit Approved By: Lee, Mao-Cheng (10/07/2021) **Revision: 3.00**

Organism

Sphingomonas spp.

- *S. paucimobilis*
- *S. parapaucimobilis*

Clinical

These organisms are found in a variety of environmental and water sources. Although of low pathogenicity, they may be associated with both nosocomial and community acquired infections. They have been associated with bacteremia, septicemia, meningitis, pneumonia, CAPD peritonitis, cellulitis, osteomyelitis, septic arthritis, wound infections, and urinary tract infections, typically but not exclusively, in immunocompromised patients. Nosocomial infections have occurred from contamination of hemodialysis solutions, contaminated hospital water systems or from contamination of bone marrow for transplants.

Usual susceptibility pattern

These organisms are usually susceptible to aminoglycosides, TMP-SMX, tetracycline and anti-pseudomonal penicillins. Susceptibility to other beta-lactam agents and quinolones is variable.

Susceptibility method

VITEK2 (*S. paucimobilis* only) or Etest method using Mueller-Hinton agar incubated in ambient air at 35°C for 20-24 hours (48 hours if slow grower).

Note: For Etest use 0.5 McFarland suspension in saline.
For mucoid strains use 1.0 McFarland.

Sphingomonas spp., Continued

Susceptibility reporting

	CSF/ Brain	Blood/Sterile Body Site/Other	Comments
Ceftazidime	✓	✓	
Ciprofloxacin		✓	Do not report in patients < 18 y **See Special Considerations**
Gentamicin		✓	
Imipenem *		2	Always report if I/R 2nd line if ceftazidime and PTZ I/R **See Special Considerations**
Meropenem	✓	2	Always report if I/R 2nd line if ceftazidime and PTZ I/R **See Special Considerations**
Minocycline		*	E test method Do not report in patients < 8 y *Report only at physicians request
Piperacillin/ tazobactam		✓	
TMP-SMX	✓	✓	
Tobramycin		✓	

* Do NOT report Imipenem from the VITEK

Special considerations

Ciprofloxacin:	Ciprofloxacin may be reported in patients < 18 years of age on physician request. Add comment: "Susceptibility testing requested by physician." #STRB
Imipenem/ Meropenem:	Resistance mechanisms for imipenem and meropenem may differ. Susceptibility or resistance to one does not necessarily predict susceptibility or resistance to the other. These antibiotics should be tested separately by a MIC method. Consult microbiologist if I/R.

Interpretation

For Etest, report actual MIC result. For interpretation (S, I, or R) report according to the nearest higher doubling dilution **(Appendix 1)**.

Use **CLSI** interpretive document for **Other Non-Enterobacterales.**