Lactobacillus spp (LTR79366)

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Organism	**Lactobacillus spp.**
Clinical	These organisms are part of the normal flora of the oropharynx and the gastrointestinal/ female genitourinary tracts. They have been associated with infections mostly in immunocompromised patients (rarely in immunocompetent individuals). They can cause bacteremia, endocarditis (high mortality/morbidity), pleuropulmonary infections, intra-abdominal abscesses, chorioamnionitis, and meningitis. Vancomycin resistant lactobacilli infections have been associated with CAPD peritonitis following prolonged vancomycin therapy. Septicemia with this organism is rare and tends to occur in immunocompromised and/or severely debilitated individuals, sometimes following ingestion of probiotic agents containing Lactobacilli. *Lactobacillus spp* have rarely been implicated in upper urinary tract infection in patients with anatomical abnormalities/stasis.
Usual susceptibility pattern	These organisms are usually susceptible to penicillin and macrolides. They have variable susceptibility to clindamycin. They are usually resistant to metronidazole, cephalosporins, and quinolones, although moxifloxacin may have some activity. Many species of Lactobacillus spp. that grow well in ambient air are intrinsically resistant to vancomycin. Daptomycin and linezolid have some activity and may be considered for serious infections in penicillin allergic patients. Meropenem MICs are typically two to three dilutions higher that imipenem.
Susceptibility method	Etest method using Mueller-Hinton agar with 5% sheep blood incubated in 5% CO_2 at 35°C for 20-24 hours (48h if required). Use anaerobic conditions if organism only grows anaerobically. **Note:** Use 1.0 McFarland suspension in broth.

Susceptibility reporting

	CSF/Brain	Blood	Sterile Body Site	Comments
Clindamycin			✓	
Imipenem		✓	✓	
Meropenem	✓			
Penicillin	✓	✓	✓	

Note: Consult microbiologist regarding the need for susceptibility testing. Susceptibility testing is recommended if organism is sole isolate from sterile body site. For other sites, or if isolated with other organisms, clinical correlation and correlation with Gram stain is required. Generally, susceptibility testing is not recommended if multiple organisms isolated.

For sterile body sites, add comment:

"In serious infections, combination therapy with gentamicin should be considered". **(21169)**

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 **Lactobacillus**

On isolates where susceptibility testing performed under anaerobic conditions, add comment:

"Susceptibility testing for this organism was performed by a non-reference method and/or required modifications to the standard test conditions. Results are probable but not definite." **(21303 and 23380)**