Cutibacterium spp. - Pseudopropionibacterium spp. (LTR79365)

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Organism

Cutibacterium spp. / Pseudopropionibacterium spp. (formerly *Propionibacterium spp.)*

Clinical

These organisms are part of normal flora of the skin, oropharynx, and gastrointestinal/ genitourinary tracts. They may often contaminate cultures of blood and body fluids. Although of low pathogenicity, they have been associated with infections involving prostheses/shunts, and foreign material. They have also been reported to cause brain abscesses, endocarditis, pulmonary infections, contact lens related infections, parotitis, odontogenic infections, and peritonitis.

- ***C. acnes*** – plays a role in the pathogenicity of acne vulgaris. It may cause deep abscesses in patients with chronic granulomatous disease.
- ***C. avidum*** - associated with skin/soft tissue abscesses.
- ***C. granulosum*** - associated with actinomycosis like infections as well as bone/joint infections.
- ***P. propionicum*** - causative agent of lacrimal canaliculitis and may cause actinomycosis like infections

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Usual susceptibility pattern

These organisms are generally susceptible to penicillin, third generation cephalosporins and vancomycin. Some resistance has been noted to macrolides, clindamycin, and tetracyclines. They are resistant to metronidazole. *C. acnes* is also resistant to mupirocin.

Susceptibility method

Etest method using Laked Blood Agar incubated anaerobically at 35°C for 48-72 hours, depending on growth characteristics. (Clindamycin – read at 48 hours).

Note: Use 1.0 McFarland suspension in pre-reduced, enriched thioglycollate broth.

Susceptibility reporting

	CSF/ Brain	Blood	Sterile Body Site	Deep Wound	Comments
Clindamycin			✓	✓	
Ceftriaxone	*	**	**		*Consult microbiologist prior to testing **Report for periprosthetic tissue/fluid isolates
Metronidazole	R	R	R	R	Report as R
Penicillin	✓	✓	✓	✓	
Vancomycin		*	*	*	**See Special Considerations**

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.
At microbiologist's discretion, add comment:

"These organisms are generally susceptible to penicillins and vancomycin, and are resistant to metronidazole. Clindamycin susceptibility is variable." **(21334)**

Special considerations

<u>Vancomycin:</u>	These organisms are predictably susceptible to vancomycin. Susceptibility testing performed only at physician request, after consultation with microbiologist.
	There are no current CLSI breakpoints. Use EUCAST breakpoints for interpretation: MIC ≤ 2 µg/mL: S MIC ≥ 4.0 µg/mL: R Add comment: "Interpretation is based upon EUCAST breakpoints." **(21178)**

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 **Anaerobes**.
For vancomycin see Special Considerations.