Table 2B-3. Zone Diameter and MIC Breakpoints for Burkholderia cepacia complex

Testing Conditions

Medium: Disk diffusion: MHA

> Broth dilution: CAMHB Agar dilution: MHA

Inoculum: Broth culture method or colony suspension, equivalent to a

0.5 McFarland standard

Incubation: 35°C±2°C; ambient air; 20-24 hours, all methods

Routine QC Recommendations (see Tables 4A-1 and 5A-1 for acceptable QC ranges)

Escherichia coli ATCC®a 25922 (for chloramphenicol, minocycline, and trimethoprim-sulfamethoxazole) Pseudomonas aeruginosa ATCC® 27853

Refer to Tables 4A-2 and 5A-2 to select strains for routine QC of B-lactam combination agents.

When a commercial test system is used for susceptibility testing, refer to the manufacturer's instructions for QC test recommendations and QC ranges.

General Comments

- (1) Refer to Table 1E for antimicrobial agents that should be considered for testing and reporting by microbiology laboratories.
- (2) For disk diffusion, test a maximum of 12 disks on a 150-mm plate and no more than 6 disks on a 100-mm plate; disks should be placed no less than 24 mm apart, center to center (see M02. Subchapter 3.6). Each zone diameter should be clearly measurable; overlapping zones prevent accurate measurement. Measure the diameter of the zones of complete inhibition (as judged by the unaided eye), including the diameter of the disk (see the MO2 Disk Diffusion Reading Guide²). Hold the Petri plate a few inches above a black background illuminated with reflected light. The zone margin should be considered the area showing no obvious, visible growth that can be detected with the unaided eye. Ignore faint growth of tiny colonies that can be detected only with a magnifying lens at the edge of the zone of inhibited growth. With trimethoprim and the sulfonamides, antagonists in the medium may allow some slight growth; therefore, disregard slight growth (20% or less of the lawn of growth) and measure the more obvious margin to determine the zone diameter.

NOTE: Information in black boldface type is new or modified since the previous edition.

For Use With M02 and M07

	Disk	Interpretive Categories and Zone Diameter Breakpoints, nearest whole mm			Interpre	tive Categorio Breakpoints µg/mL		
Antimicrobial Agent	Content	S	1	R	S		R	Comments
B-LACTAM COMBINATION	AGENTS							
Ticarcillin-clavulanate*	-	-	-	-	≤16/2	32/2-64/2	≥128/2	
CEPHEMS (PARENTERAL) (Including cephal	osporins I,			refer to GI	ossary I.)		
Ceftazidime	30 µg	≥21	18-20	≤17	≤8	16	≥ 32	
CARBAPENEMS								
Meropenem	10 μg	≥20	16-19	≤15	≤4	8	≥16	
TETRACYCLINES								
Minocycline	30 µg	≥19	15-18	≤14	≤4	8	≥16	
FLUOROQUINOLONES								
Levofloxacin	-	-	-	-	≤2	4	≥8	
FOLATE PATHWAY ANTAG	ONISTS							
Trimethoprim-	1.25/23.75	≥16	11-15	≤10	≤2/38	-	≥4/76	
sulfamethoxazole	μg							
PHENICOLS								
Chloramphenicol*	-	-	-	-	≤8	16	≥32	(3) Not routinely reported on organisms isolated from the urinary tract.

Abbreviations: ATCC®, American Type Culture Collection; CAMHB, cation-adjusted Mueller-Hinton broth; I, intermediate; MHA, Mueller-Hinton agar; MIC, minimal inhibitory concentration; QC, quality control; R, resistant; S, susceptible.

Symbol: *, designation for "Other" agents that are not included in Tables 1 but have established clinical breakpoints.

Footnote

a. ATCC® is a registered trademark of the American Type Culture Collection.

References for Table 2B-3

- ¹ CLSI. Performance Standards for Antimicrobial Disk Susceptibility Tests. 13th ed. CLSI standard M02. Clinical and Laboratory Standards Institute; 2018.
- ² CLSI. MO2 Disk Diffusion Reading Guide. 1st ed. CLSI quick guide MO2QG. Clinical and Laboratory Standards Institute; 2018.