

Evaluation of the Direct MacConkey Method for Identification of Carbapenem-Resistant Gram-Negative Organisms from Rectal Swabs: Re-evaluating Zone Diameter Cutoffs

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Supplemental Materials Tables 1 and 2

Supplemental Table 1: Sensitivity and Specificity of Various Ertapenem Zone Diameter Cutoffs for the Detection of Different Carbapenem-Resistant Organism Groups

ZD	CRO		CRE		CR-NF		CPO		CPE		CP-NF	
	Sens	Spec	Sens	Spec	Sens	Spec	Sens	Spec	Sens	Spec	Sens	Spec
6	30%	99%	20%	97%	44%	98%	43%	97%	45%	96%	43%	96%
≤7	30%	99%	20%	97%	45%	98%	43%	97%	45%	96%	44%	96%
≤8	31%	99%	21%	96%	46%	98%	44%	96%	46%	96%	45%	96%
≤9	33%	99%	22%	96%	49%	98%	46%	96%	47%	96%	48%	96%
≤10	36%	99%	24%	96%	54%	97%	50%	96%	48%	95%	53%	95%
≤11	38%	99%	26%	95%	57%	97%	51%	95%	49%	95%	55%	95%
≤12	41%	98%	28%	95%	60%	97%	53%	95%	50%	94%	58%	94%
≤13	43%	98%	30%	95%	61%	96%	55%	94%	51%	93%	61%	94%
≤14	45%	98%	32%	94%	64%	96%	58%	94%	53%	93%	65%	93%
≤15	49%	97%	36%	94%	68%	95%	63%	93%	58%	92%	70%	92%
≤16	51%	97%	38%	93%	70%	95%	66%	93%	61%	92%	72%	92%
≤17	53%	97%	41%	93%	71%	94%	68%	92%	65%	91%	72%	91%
≤18	56%	96%	44%	92%	74%	94%	70%	92%	68%	91%	73%	91%
≤19	59%	96%	48%	92%	75%	93%	72%	91%	71%	90%	73%	90%
≤20	66%	94%	56%	90%	81%	91%	79%	89%	77%	88%	81%	88%
≤21	70%	94%	60%	89%	84%	90%	80%	88%	79%	87%	81%	87%
≤22	75%	92%	66%	88%	87%	88%	85%	86%	84%	85%	86%	85%
≤23	78%	90%	70%	86%	90%	86%	87%	84%	87%	83%	86%	83%
≤24	82%	88%	75%	84%	91%	84%	91%	82%	92%	81%	88%	80%
≤25	92%	83%	88%	78%	96%	78%	95%	76%	96%	74%	93%	74%
≤26	97%	78%	96%	74%	98%	73%	98%	71%	98%	70%	97%	70%
AUC (95% CI)	0.932 (0.924- 0.941)		0.879 (0.866- 0.892)		0.942 (0.931- 0.952)		0.920 (0.904- 0.935)		0.914 (0.894- 0.935)		0.913 (0.889- 0.936)	

Supplemental Table 2: Sensitivity and Specificity of Various Meropenem Zone Diameter Cutoffs for the Detection of Different Carbapenem-Resistant Organism Groups

ZD	CRO		CRE		CR-NF		CPO		CPE		CP-NF	
	Sens	Spec	Sens	Spec	Sens	Spec	Sens	Spec	Sens	Spec	Sens	Spec
6	10%	100%	9%	99%	14%	99%	29%	100%	30%	99%	31%	99%
≤8	11%	100%	10%	99%	15%	99%	30%	100%	30%	99%	34%	99%
≤10	12%	100%	11%	99%	17%	99%	33%	100%	32%	99%	36%	99%
≤11	13%	100%	11%	99%	17%	99%	33%	99%	33%	99%	36%	99%
≤12	14%	100%	13%	99%	19%	99%	36%	99%	37%	99%	38%	99%
≤13	15%	100%	13%	99%	21%	99%	37%	99%	37%	99%	41%	99%
≤14	16%	100%	14%	99%	21%	99%	39%	99%	37%	99%	43%	99%
≤15	18%	100%	15%	99%	24%	99%	39%	99%	38%	98%	43%	98%
≤16	19%	100%	17%	99%	25%	99%	43%	99%	43%	98%	45%	98%
≤17	21%	100%	18%	98%	27%	99%	44%	99%	44%	98%	48%	98%
≤18	22%	99%	19%	98%	28%	99%	45%	98%	45%	98%	49%	98%
≤19	24%	99%	20%	98%	32%	98%	47%	98%	45%	98%	51%	98%
≤20	29%	99%	24%	97%	38%	98%	52%	97%	50%	97%	56%	97%
≤21	30%	99%	25%	97%	40%	98%	52%	97%	51%	97%	56%	97%
≤22	34%	99%	28%	97%	45%	97%	54%	97%	52%	96%	58%	96%
≤23	35%	99%	29%	97%	46%	97%	55%	96%	54%	96%	58%	96%
≤24	39%	98%	32%	96%	51%	96%	58%	95%	56%	95%	62%	95%
≤25	44%	97%	37%	95%	54%	95%	64%	95%	64%	94%	66%	94%
≤26	50%	96%	45%	93%	58%	93%	71%	93%	71%	92%	71%	92%
≤27	53%	95%	49%	93%	60%	93%	72%	92%	73%	91%	71%	91%
≤28	61%	92%	57%	89%	66%	89%	79%	88%	81%	87%	78%	87%
≤29	63%	91%	59%	89%	68%	88%	81%	87%	83%	87%	79%	86%
≤30	83%	83%	82%	80%	85%	79%	91%	78%	90%	77%	92%	77%
≤31	85%	82%	83%	79%	88%	78%	92%	77%	91%	76%	92%	76%
AUC (95% CI)	0.869 (0.853- 0.885)		0.836 (0.815- 0.857)		0.871 (0.849- 0.894)		0.908 (0.884- 0.933)		0.902 (0.867- 0.936)		0.903 (0.867- 0.939)	

