

Table S2. Sensitivity and specificity (by laboratory, and average across all participating laboratories) of the mCIM in the stage 2, nine-laboratory study when setting the positive cut-off criterion at each possible zone diameter result

mCIM zone	Site 1 ^a		Site 2		Site 3		Site 4		Site 5		Site 6		Site 7 ^b		Site 8		Site 9		All sites		
	size (mm)	sens.	Spec.	Sens.	Spec.	Sens. (%)	Spec. (%)	Mean of sens. values (%)	Mean of spec. values (%)	Sum of mean sens. and mean spec.											
classified as positive	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
≤ 6	23/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	24/27	34/34	23/27	34/34	0/25	34/34	27/27	33/34	26/27	34/34	82.7	99.7	182.4
	(88.5)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(88.8)	(100)	(85.2)	(100)	(0)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 7	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	24/27	34/34	24/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	95.5	99.7	195.2
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(88.8)	(100)	(88.9)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 8	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	24/27	34/34	25/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	95.9	99.7	195.6
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(88.8)	(100)	(92.6)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 9	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	25/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	96.3	99.7	196.0
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(92.6)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 10	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	96.7	99.7	196.4
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 11	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	96.7	99.7	196.4
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 12	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	96.7	99.7	196.4

	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 13	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	27/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	97.1	99.7	196.8
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(100)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 14	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	27/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	97.1	99.7	196.8
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(100)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 15	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	27/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	97.1	99.7	196.8
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(100)	(100)	(100)	(100)	(100)	(97.1)	(96.3)/	(100)			
≤ 16	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	27/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	97.1	99.7	196.8
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(100)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 17	26/26	34/34	26/27	34/34	25/27	34/34	26/27	34/34	25/27	34/34	27/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	97.1	99.7	196.8
	(100)	(100)	(96.3)	(100)	(92.6)	(100)	(96.3)	(100)	(92.6)	(100)	(100)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 18	26/26	34/34	26/27	34/34	26/27	33/34	26/27	34/34	25/27	34/34	27/27	34/34	25/25	34/34	27/27	33/34	26/27	34/34	97.5	99.4	196.9
	(100)	(100)	(96.3)	(100)	(96.3)	(97.1)	(96.3)	(100)	(92.6)	(100)	(100)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 19	26/26	33/34	26/27	34/34	26/27	32/34	26/27	34/34	25/27	32/34	27/27	34/34	25/25	32/34	27/27	33/34	26/27	34/34	97.5	97.4	194.9
	(100)	(97.1)	(96.3)	(100)	(96.3)	(94.1)	(96.3)	(100)	(92.6)	(94.1)	(100)	(100)	(100)	(100)	(100)	(97.1)	(96.3)	(100)			
≤ 20	26/26	14/34	27/27	33/34	26/27	20/34	26/27	31/34	25/27	25/34	27/27	32/34	25/25	5/34	27/27	33/34	26/27	10/34	97.9	66.3	164.2
	(100)	(41.2)	(100)	(97.1)	(96.3)	(58.8)	(96.3)	(91.2)	(92.6)	(73.5)	(100)	(94.1)	(100)	(14.7)	(100)	(97.1)	(96.3)	(29.4)			
≤ 21	26/26	3/34	27/27	33/34	26/27	10/34	26/27	29/34	26/27	12/34	27/27	24/34	25/25	1/34	27/27	32/34	27/27	3/34	98.8	48.0	146.8
	(100)	(8.8)	(100)	(97.1)	(96.3)	(29.4)	(96.3)	(85.3)	(96.3)	(35.3)	(100)	(70.6)	(100)	(2.9)	(100)	(94.1)	(100)	(8.8)			

≤ 22	26/26 (100)	0/34 (0)	27/27 (100)	30/34 (88.2)	26/27 (96.3)	4/34 (11.8)	26/27 (96.3)	25/34 (73.5)	27/27 (100)	5/34 (14.7)	27/27 (100)	10/34 (29.4)	25/25 (100)	0/34 (0)	27/27 (100)	32/34 (94.1)	27/27 (100)	0/34 (0)	99.2 34.6	34.6	133.8
≤ 23	26/26 (100)	0/34 (0)	27/27 (100)	15/34 (44.1)	26/27 (96.3)	2/34 (5.9)	26/27 (96.3)	18/34 (52.9)	27/27 (100)	3/34 (8.8)	27/27 (100)	2/34 (5.9)	25/25 (100)	0/34 (0)	27/27 (100)	31/34 (91.2)	27/27 (100)	0/34 (0)	99.2 23.2	23.2	122.4
≤ 24	26/26 (100)	0/34 (0)	27/27 (100)	3/34 (8.8)	26/27 (96.3)	1/34 (2.9)	27/27 (100)	14/34 (41.2)	27/27 (100)	1/34 (2.9)	27/27 (100)	1/34 (2.9)	25/25 (100)	0/34 (0)	27/27 (100)	27/34 (79.4)	27/27 (100)	0/34 (0)	99.6 15.3	15.3	114.9
≤ 25	26/26 (100)	0/34 (0)	27/27 (100)	1/34 (2.9)	26/27 (96.3)	0/34 (0)	27/27 (100)	6/34 (17.6)	27/27 (100)	1/34 (2.9)	27/27 (100)	0/34 (0)	25/25 (100)	0/34 (0)	27/27 (100)	19/34 (55.9)	27/27 (100)	0/34 (0)	99.6 8.8	8.8	108.4
≤ 26	26/26 (100)	0/34 (0)	27/27 (100)	0/34 (0)	26/27 (96.3)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	1/34 (2.9)	27/27 (100)	0/34 (0)	25/25 (100)	0/34 (0)	27/27 (100)	13/34 (38.2)	27/27 (100)	0/34 (0)	99.6 4.6	4.6	104.2
≤ 27	26/26 (100)	0/34 (0)	27/27 (100)	0/34 (0)	26/27 (96.3)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	1/34 (2.9)	27/27 (100)	0/34 (0)	25/25 (100)	0/34 (0)	27/27 (100)	9/34 (26.5)	27/27 (100)	0/34 (0)	99.6 3.3	3.3	102.9
≤ 28	26/26 (100)	0/34 (0)	27/27 (100)	0/34 (0)	26/27 (96.3)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	1/34 (2.9)	27/27 (100)	0/34 (0)	25/25 (100)	0/34 (0)	27/27 (100)	4/34 (11.8)	27/27 (100)	0/34 (0)	99.6 1.6	1.6	101.2
≤ 29	26/26 (100)	0/34 (0)	27/27 (100)	0/34 (0)	26/27 (96.3)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	25/25 (100)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	99.6 0	0	99.6
≤ 30	26/26 (100)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	25/25 (100)	0/34 (0)	27/27 (100)	0/34 (0)	27/27 (100)	0/34 (0)	100 0	0	100
≤ 31	26/26	0/34	27/27	0/34	27/27	0/34	27/27	0/34	27/27	0/34	27/27	0/34	25/25	0/34	27/27	0/34	27/27	0/34	100	0	100

	(100)	(0)	(100)	(0)	(100)	(0)	(100)	(0)	(100)	(0)	(100)	(0)	(100)	(0)	(100)	(0)	(100)	(0)			
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mCIM, modified carbapenem inactivation method; sens., sensitivity; spec., specificity

^a One strain that was mCIM-positive at Site 1 on the basis of multiple small bacterial colonies growing within the zone of inhibition was not included in this analysis. ^b Two strains that were mCIM-positive at Site 7 on the basis of multiple small bacterial colonies growing within the zone of inhibition were not included in this analysis.