Supplemental Material

TABLE S1 Exebacase and Antibiotic MIC values (µg/mL) for all MSSA and MRSA isolates determined in CAMHB-HSD (and in the standard AST medium for each antibiotic)[a]

Designation	EXE	DAP	VAN	NAF	OXA	CFZ	TLV	AZM	CLI	GEN	LNZ	LVX	SXT[b]
ATCC BAA-1718 (MSSA)	0.5	0.25 (0.5)	0.5 (1)	0.5 (0.25)	1 (0.5)	0.5 (0.5)	2 (0.12)	0.03 (1)	0.5 (0.5)	1 (0.5)	2 (2)	0.25 (0.25)	0.5/9.5 (0.25/4.5)
NRS 107 (MSSA)	0.5	0.25 (0.5)	1 (2)	0.5 (0.25)	1 (0.5)	1 (0.5)	4 (0.12)	0.02 (0.25)	0.5 (0.5)	0.5 (1)	1 (1)	0.25 (0.25)	1/19 (0.5/9.5)
NRS 143 (MSSA)	0.5	0.25 (0.5)	1 (1)	0.5 (0.25)	0.5 (0.5)	1 (1)	4 (0.12)	0.06 (0.5)	2 (0.12)	1 (0.5)	2 (4)	0.25 (0.25)	0.25/4.75 (0.125/2.37)
NRS 112 (MSSA)	0.5	0.25 (0.5)	1 (1)	0.25 (0.5)	0.5 (0.25)	1 (0.5)	4 (0.06)	0.06 (1)	2 (0.25)	1 (1)	2 (4)	0.25 (0.25)	0.5/9.5 (0.5/9.5)
NRS 161 (MSSA)	0.5	0.25 (0.5)	1 (1)	0.25 (0.25)	0.5 (0.25)	1 (0.5)	2 (0.03)	0.06 (1)	2 (0.12)	0.5 (0.5)	2 (2)	0.125 (0.125)	0.25/4.75 (0.25/4.75)
NRS 111 (MSSA)	0.5	0.25 (0.5)	1 (1)	0.5 (0.25)	0.5 (0.25)	0.5 (0.25)	4 (0.12)	0.06 (1)	2 (0.25)	1 (0.5)	2 (4)	0.25 (0.25)	0.5/9.5 (0.25/4.75)
ATCC 29213 (MSSA)	0.5	0.25 (0.5)	0.5 (1)	0.5 (0.25)	0.5 (0.5)	1 (0.5)	4 (0.12)	0.06 (1)	1 (0.25)	0.5 (0.5)	2 (4)	0.125 (0.25)	0.5/9.5 (0.25/4/75)
ATCC 49521 (MSSA)	0.5	0.5 (1)	1 (1)	0.25 (0.25)	1 (0.5)	1 (1)	2 (0.06)	0.03 (1)	2 (0.25)	0.5 (0.5)	2 (4)	0.125 (0.125)	0.5/9.5 (0.25/4.75)
JMI 2559 (MSSA)	0.5	0.25 (0.5)	1 (1)	0.5 (0.25)	0.5 (0.25)	0.5 (0.5)	2 (0.12)	0.06 (1)	2 (0.12)	1 (1)	2 (2)	0.125 (0.25)	0.5/9.5 (0.25/4/75)
JMI 3126 (MSSA)	0.5	0.25 (0.5)	1 (1)	0.5 (0.25)	0.5 (0.25)	1 (0.5)	4 (0.25)	0.06 (1)	1 (0.12)	1 (0.5)	2 (2)	0.25 (0.25)	0.5/9.5 (0.5/9.5)
NRS 271 (MRSA)	0.25	0.5 (1)	1 (1)	16 (32)	64 (128)	32 (128)	2 (0.12)	0.03 (1)	32 (2)	0.5 (1)	16 (>16)	64 (>16)	0.25/4.75 (0.25/4.75)

NRS 100 (MRSA)	0.5	0.5 (1)	1 (2)	64 (128)	256 (128)	256 (128)	4 (0.12)	0.06 (0.5)	0.25 (0.03)	0.125 (0.25)	2 (2)	0.5 (0.5)	2/38 (0.5/9.5)
ATCC 43300 (MRSA)	1	0.5 (0.5)	1 (1)	4 (2)	8 (16)	16 (32)	4 (0.12)	512 (512)	1024 (512)	0.5 (0.5)	1 (2)	0.25 (0.25)	0.25/4.75 (0.125/3.7)
ATCC BAA-44 (MRSA)	0.5	0.5 (1)	1 (1)	4 (8)	8 (32)	16 (16)	2 (0.12)	0.06 (1)	2 (0.25)	0.5 (0.5)	2 (2)	0.25 (0.25)	0.5/9.5 (0.5/4.75)
CAIRD 456 (MRSA)	0.5	1 (1)	1 (1)	16 (32)	64 (128)	64 (128)	4 (0.12)	0.03 (1)	4 (0.5)	32 >16	2 (2)	0.25 (0.125)	1/19 (0.5/4.75)
JMI 227 (MRSA)	0.25	0.5 (1)	1 (1)	4 (8)	8 (32)	2 (4)	2 (0.06)	2 (4)	2 (0.25)	0.25 (0.5)	2 (2)	16 (>16)	0.5/9.5 (0.25/4.75)
JMI 1280 (MRSA)	0.5	1 (1)	1 (1)	256 (256)	256 (256)	65 (128)	4 (0.12)	1024 (512)	1024 (512)	0.5 (0.5)	2 (1)	32 (>16)	0.5/9.5 (0.5/9.5)
JMI 4789 (MRSA)	0.5	1 (1)	1 (1)	4 (6)	64 (64)	4 (8)	4 (0.12)	0.03 (0.5)	2 (0.25)	0.5 (0.5)	2 (2)	0.25 (0.25)	0.5/9.5 (0.5/9.5)
MW2 (MRSA)	0.5	1 (1)	1 (1)	4 (8)	64 (64)	32 (32)	2 (0.06)	0.06 (0.5)	2 (0.5)	0.5 (0.5)	2 (2)	0.25 (0.25)	0.5/9.5 (0.25/4.75)
ATCC 33591 (MRSA)	0.5	1 (1)	2 (1)	64 (128)	256 (256)	128 (128)	2 (0.06)	1024 (512)	1024 (512)	1 (2)	2 (2)	0.25 (0.5)	2/38 (1/19)

[a]MIC values for each antibiotic determined in the standard AST media described in CLSI document M100-A29 (1), are indicated in parentheses below each antibiotic. Abbreviations for each agent (and the standard AST media for each antibiotic) are as follows: EXE, exebacase; DAP, daptomycin (CAMHB supplemented with Ca^{2+} to a final concentration of 50 µg/mL); VAN, vancomycin (CAMHB); NAF, nafcillin (CAMHB supplemented with 2% NaCl); OXA, oxacillin (CAMHB supplemented with 2% NaCl); CFZ, cefazolin (CAMHB); TLV, telavancin (CAMHB supplemented with 0.002% polysorbate 80); AZM, azithromycin (CAMHB); CLI, clindamycin (CAMHB); GEN, gentamicin (CAMHB); LNZ, linezolid (CAMHB); LVX, levofloxacin (CAMHB); SXT, Trimethoprim-Sulfamethoxazole (CAMHB). All solvents and diluents used for the preparing antibiotic stock solutions are described in CLSI document M100-A28 (1).

[b]The MIC values for SXT are reported in the manner described in CLSI document M100-A29 (1), based on the minimal inhibitory concentrations of trimethoprim/sulfamethoxazole (when tested at a trimethoprim-to-sulfamethoxazole combination ratio of 1:19).

28 **TABLE S2** Strains utilized in this study

Designation	Type	Description	Source and/or Reference
NRS 271	MRSA	Staphylococcal Cassette Chromosome *mec* (SCC*mec*) type IV, isolated from wound infection, linezolid-resistant	BEI Resources, catalog number NR-46062 (2)
NRS 100	MRSA	Strain COL, SCC*mec* type I, Panton-Valentine leucocidin (PVL) toxin-negative	BEI Resources, catalog number NR-45906 (3)
ATCC 43300	MRSA	Reference strain, SCC*mec* type II, PVL-negative	ATCC (4)
ATCC BAA-44	MRSA	Hospital isolate, SCC*mec* type 1a, PVL-negative	ATCC (5)
CAIRD 456	MRSA	USA100, Hospital-acquired MRSA	David Nicholau, Center for Anti-Infective Research and Development, Hartford Hospital (6)
JMI 227	MRSA	Clinical blood isolate, SCC*mec* type IV, PVL-negative	Purchased from JMI Laboratories
JMI 1280	MRSA	Clinical blood isolate, SCC*mec* type II, PVL-negative	Purchased from JMI Laboratories
JMI 4789	MRSA	Clinical skin and soft tissue infection isolate, SCC*mec* type IV, PVL-positive	Purchased from JMI Laboratories

NRS123	MRSA	Strain MW2, SCC*mec* type IV, PVL-positive, USA400	BEI Resources, catalog number NRS123 (7)
ATCC 33591	MRSA	SCC*mec* type I, PVL negative	ATCC (8)
ATCC BAA-1718	MSSA	Community acquired MSSA	ATCC (9)
NRS 107	MSSA	Strain RN4220/pG0400, mupirocin-resistant	BEI Resources, catalog number NR-45913 (10)
NRS 143	MSSA	Strain CTC8325 (RN3984), toxic shock syndrome toxin-1 (TSST-1), agr group III prototype	BEI Resources, catalog number NRS143 (11)
NRS 112	MSSA	Strain MN8, TSST-1, USA200	BEI Resources, catalog number NR-45918 (12)
NRS 161	MSSA	Isolated from skin infection, PVL-positive, skin infection, *agr* group 1	BEI Resources, catalog number NR-45961
NRS 111	MSSA	Food poisoning isolate, FRI913, TSST-1	BEI Resources, catalog number NR-45917 (13)
ATCC 29213	MSSA	ATCC quality control strain	ATCC (4)
ATCC 49521	MSSA	Isolated in 2011 from bacteremia patient	Purchased from JMI Laboratories
JMI 2559	MSSA	Isolated from respiratory tract infection	Purchased from JMI Laboratories

JMI 3126	MSSA	Isolated from respiratory tract infection	Purchased from JMI Laboratories

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