### S1 Table. Strains, plasmids, and primers used in this study

**Strains**

| Designation | Genotype or description                                                                 | Strain ID   | Reference  |
|-------------|----------------------------------------------------------------------------------------|-------------|------------|
| **A. baumannii** |                                                                                       |             |            |
| 17978       | cerebrospinal fluid isolate, AbaAL44* ("UN") type, ATCC 17978                         | EGA83       | [1, 2]     |
| 17978 bfmS*  | ATCC 17978 bfmS(G467Dfs*19)                                                           | EGA127      | [3]        |
| 17978 ΔbfmS  | ATCC 17978 ΔbfmS::aacC1                                                                | EGA195      | [3]        |
| 17978 ΔbfmRS | ATCC 17978 ΔbfmRS::aacC1                                                               | EGA495      | [7]        |
| 17978 ΔitrA  | ATCC 17978 ΔitrA                                                                        | EGA295      | [3]        |
| 17978 Δwzc   | ATCC 17978 Δwzc::aacC1, isolate 27                                                     | EGA106-27   | [3]        |
| 17978 Δwzc wzc* | ATCC 17978 Δwzc::aacC1, wzc* by marker rescue of EGA106-27                          | EGA260      | [3]        |
| 17978 ΔdsbA  | ATCC 17978 ΔdsbA                                                                        | NRA134      | This work  |
| 17978 Δlon   | ATCC 17978 Δlon                                                                        | JBA154      | This work  |
| 17978 ΔgtrOC3| ATCC 17978 ΔgtrOC3                                                                      | JBA160      | This work  |
| 17978 ΔgtrOC4| ATCC 17978 ΔgtrOC4                                                                      | JBA161      | This work  |
| 17978 Δgtr6  | ATCC 17978 Δgtr6                                                                        | JBA202      | This work  |
| 17978 ΔrnaA  | ATCC 17978 ΔrnaA                                                                        | JBA211      | This work  |
| 17978 Δslt   | ATCC 17978 Δslt                                                                        | EGA520      | This work  |
| 17978 ΔrnaAΔbfmRS | ATCC 17978 ΔrnaA ΔbfmRS                                                               | JBA234      | This work  |
| 17978 ΔdsbAΔbfmRS | ATCC 17978 ΔdsbA ΔbfmRS                                                               | JBA235      | This work  |
| 17978 bfmS*ΔitrA | ATCC 17978 bfmS(G467Dfs*19) ΔitrA                                                    | JBA210      | This work  |
| 17978 ΔbfmS*Δgtr6  | ATCC 17978 ΔbfmS::aacC1 Δgtr6                                                        | JBA208      | This work  |
| 17978 ΔgtrOC3ΔitrA | ATCC 17978 ΔgtrOC3 ΔitrA                                                             | JBA212      | This work  |
| 17978 ΔgtrOC3Δgtr6 | ATCC 17978 ΔgtrOC3 Δgtr6                                                             | JBA215      | This work  |
| 17978 ΔdsbA/- | NRA134 with pYDE152                                                                   | JBA172      | This work  |
| 17978 ΔdsbA/dsbA | NRA134 with pJE101 (P(IPTG)-dsbA)                                                   | JBA168      | This work  |
| 17978 Δlon/- | JBA154 with pYDE152                                                                   | JBA174      | This work  |
| 17978 Δlon/lon | JBA154 with pJE103 (P(IPTG)-lon)                                                      | JBA170      | This work  |
| 17978 ΔgtrOC3/- | JBA160 with pYDE152                                                                  | JBA167      | This work  |
| 17978 ΔgtrOC3/ gtrOC3 | JBA160 with pJE100 (P(IPTG)-gtrOC3)                                                  | JBA167      | This work  |
| 17978 ΔgtrOC4/- | JBA161 with pYDE152                                                                  | JBA173      | This work  |
| 17978 ΔgtrOC4/ gtrOC4 | JBA161 with pJE102 (P(IPTG)-gtrOC4)                                                  | JBA169      | This work  |
| 17978 ΔrnaA/- | JBA211 with pYDE152                                                                   | JBA217      | This work  |
| 17978 ΔitrA/- | EGA295 with pYDE152                                                                   | JBA270      | This work  |
| 17978 ΔitrA/itrA | EGA295 with pJE172 (P(IPTG)-itrA)                                                    | JBA271      | This work  |
| 17978 + P(IPTG)-rnaA | ATCC 17978 WT with pJE127 (P(IPTG)-rnaA)                                           | JBA266      | This work  |
| 17978 bfmS* + P(IPTG)-rnaA | EGA127 with pJE127 (P(IPTG)-rnaA)                                                 | JBA256      | This work  |
| 17978 + P(IPTG)-dsbA | ATCC 17978 WT with pJE101 (P(IPTG)-dsbA)                                           | JBA349      | This work  |
| 17978 gtr6440A<sub>9+8</sub> | Loki non-susceptible derivative of WT ATCC 17978 (gtr6440A<sub>9+8</sub>) 2 independent isolates | JBA149, JBA267 | This work  |
| 17978 wzx377T<sub>9+10</sub> | Loki non-susceptible derivative of WT ATCC 17978 (wzx377T<sub>9+10</sub>) | JBA150      | This work  |
| 17978 bfmS* gtr6440A<sub>9+8</sub> | Loki non-susceptible derivative of EGA127 (gtr6440A<sub>9+8</sub>) | JBA151      | This work  |
| 17978 bfmS* bfmR(G100D) | Loki non-susceptible derivative of EGA127 [bfmR(G100D)] | JBA152      | This work  |
### S1 Table (continued)

| Strain | Description | Host | Reference |
|--------|-------------|------|-----------|
| 17978 bfmS* bfmR(T85I) | Loki non-susceptible derivative of EGA127 [bfmR(T85I)] | JBA153 | This work |
| 17978 bfmS* gtr6384A6−7 | Loki non-susceptible derivative of EGA127 (gtr6384A6−7) | JBA261 | This work |
| 17978 ΔbfmS gtr6440A9−8 | Loki non-susceptible derivative of EGA195 (gtr6440A9−8) | JBA268 | This work |
| 17978 gtr6440A6−9/Δ* | JBA149 with pYDE152 | JBA204 | This work |
| 1798 gtr6440A6−9/Δ6 | JBA149 with pJE121 (P(IPTG)-gtr6) | JBA205 | This work |
| 17978 10840p-GFP | ATCC 17978 WT with pEGE246 (10840p-GFP) | EGA616 | [7] |
| 17978 ΔbfmRS 10840p-GFP | EGA495 with pEGE246 (18040p-GFP) | NRA104 | This work |
| 17978 ΔdsbA 10840p-GFP | NRA134 with pEGE246 (18040p-GFP) | NRA178 | This work |
| 17978 ΔdsbAΔbfmRS 10840p-GFP | JBA235 with pEGE246 (18040p-GFP) | NRA236 | This work |
| 17978 ΔmaA 10840p-GFP | JBA211 with pEGE246 (18040p-GFP) | NRA238 | This work |
| 17978 ΔmaAΔbfmRS 10840p-GFP | JBA234 with pEGE246 (18040p-GFP) | NRA240 | This work |
| 17978 adcP-GFP | ATCC 17978 WT with pEGE313 (adcP-GFP) | EGA786 | [7] |
| 17978 ΔdsbA adcP-GFP | NRA134 with pEGE313 (adcP-GFP) | NRA237 | This work |
| 17978 ΔmaA adcP-GFP | JBA211 with pEGE313 (adcP-GFP) | NRA239 | This work |
| 17961 blood isolate, ATCC | EGA56 | [1] |
| 19606 urine isolate, ATCC | EGA2M | [1] |
| 19606 ΔbfmS | ATCC 19606 ΔbfmS::aacC1 | EGA216 | [3] |
| AB5075 bone isolate/osteomyelitis, AB5075-UW | EGA714 | [4] |
| AB5075 bfmS::Tn | AB5075-UW bfmS115::T26 | EGA725 | [4] |
| BAA-1790 sputum isolate (2008, Washington, DC), ATCC | JBA394 | [6] |
| BAA-1790 ΔmaA | BAA-1790 ΔmaA, via allele exchange with pJE193 | JBA395 | This work |
| BAA-1790 ΔdsbA | BAA-1790 ΔdsbA, via allele exchange with pJE195 | JBA396 | This work |
| EGA10 | wound isolate, Tufts University Medical Center, ST2 | EGA10 | This work |
| EGA65 | blood isolate, Tufts University Medical Center, ST2 | EGA65 | This work |
| EGA10/- | EGA10 with pYDE152 | JBA246 | This work |
| EGA10/gtr6 | EGA10 with pJE121 (P(IPTG)-gtr6) | JBA247 | This work |
| EGA65/- | EGA65 with pYDE152 | JBA248 | This work |
| EGA65/gtr6 | EGA65 with pJE121 (P(IPTG)-gtr6) | JBA249 | This work |

**E. coli**

| Strain | Description | Host | Reference |
|--------|-------------|------|-----------|
| DH5α supE44 ΔlacU169 (φ80lacZΔM15) hsdR17 recA1 endA1 gyrA96 thi-1 relA1 | EGE1 | [8] |
| DH5α (λ.pir) tet::Mu recA | EGE4 | [9] |
| XL1-blue recA1 endA1 gyrA96 thi-1 hsdR17 supE44 relA1 lac [F’ proAB lacZΔM15 Tn10 Tc’] | AFE81 | Stratagene |

**Bacteriophage**

| Strain | Description | Host | Reference |
|--------|-------------|------|-----------|
| Loki vB_AbaS_Loki, lytic *Acinetobacter* siphovirus isolated from activated sewage sludge | Loki | [10] |
| Loki* Derivative of Loki showing enhanced virulence vs 17978 and BAA-1790 | JBΦ-15C | This work |
### S1 Table (continued)

#### Plasmids

| Plasmid       | Description                                                                 | Reference |
|---------------|-----------------------------------------------------------------------------|----------|
| pUC18         | oriColE1 MCS Cb'                                                            | [11]     |
| pSR47S        | Conditionally replicating allele exchange plasmid (oriTRP4 oriR6K sacB Km')  | [12]     |
| pJB4648       | Conditionally replicating allele exchange plasmid (oriTRP4 oriR6K sacB Gm')  | [12]     |
| pEGE305       | P(IPTG) shuttle vector (ori-pBR322 ori-pWH1277 bla::lacI-T5lacP Tc')        | [7]      |
| pYDE152       | P(IPTG) shuttle vector (ori-pBR322 ori-pWH1277 bla::lacI-T5lacP-MCS Tc')    | [13]     |
| pDL1100       | Himar1 mariner (Km') delivery plasmid, C9 transposase (ori-pSC101 Cb')     | [14]     |
| pJE89         | pUC18 containing homology arm upstream of gtrOC3                            | This work|
| pJE90         | pUC18 containing homology arm downstream of gtrOC3                          | This work|
| pJE93         | pJB4648::ΔgtrOC3 allele exchange construct                                  | This work|
| pJE91         | pUC18 containing homology arm upstream of gtrOC4                            | This work|
| pJE92         | pUC18 containing homology arm downstream of gtrOC4                          | This work|
| pJE94         | pJB4648::ΔgtrOC4 allele exchange construct                                  | This work|
| pJE114        | pUC18 containing homology arm upstream of gtr6                              | This work|
| pJE115        | pUC18 containing homology arm downstream of gtr6                            | This work|
| pJE118        | pJB4648::Δgtr6 allele exchange construct                                    | This work|
| pJE122        | pUC18 containing homology arm upstream of maA                               | This work|
| pJE123        | pUC18 containing homology arm downstream of maA                             | This work|
| pJE124        | pJB4648::ΔmaA allele exchange construct                                     | This work|
| pEGE242       | pSR47S::Δslt allele exchange construct                                      | This work|
| pEGE133       | pSR47S::ΔbfmRS::aacC1 allele exchange construct                             | [3]      |
| pEGE125       | pSR47S::ΔbfmS::aacC1 allele exchange construct                              | [3]      |
| pEGE181       | pSR47S::ΔitrA allele exchange construct                                     | [3]      |
| pJE95         | pUC18::gtrOC3                                                              | This work|
| pJE99         | pUC18::gtrOC4                                                              | This work|
| pJE120        | pUC18::gtr6                                                                | This work|
| pJE171        | pUC18::itrA                                                                | This work|
| pJE126        | pUC18::maA                                                                 | This work|
| pJE97         | pUC18::lon                                                                 | This work|
| pJE98         | pUC18::dsbA                                                                | This work|
| pJE100        | pYDE152::gtrOC3 (P(IPTG)-gtrOC3)                                            | This work|
| pJE102        | pYDE152::gtrOC4 (P(IPTG)-gtrOC4)                                            | This work|
| pJE121        | pYDE152::gtr6 (P(IPTG)-gtr6)                                               | This work|
| pJE172        | pYDE152::itrA (P(IPTG)-itrA)                                               | This work|
| pJE127        | pYDE152::maA (P(IPTG)-maA)                                                 | This work|
| pJE103        | pYDE152::lon (P(IPTG)-lon)                                                  | This work|
| pJE101        | pYDE152::dsbA (P(IPTG)-dsbA)                                                | This work|
| pEGE246       | ACX60_RS18040p-gfpmut3 reporter plasmid (ori-pBR322 ori-pWH1277, Tc')      | [7]      |
| pEGE313       | adcp-gfpmut3 reporter plasmid (ori-pBR322 ori-pWH1277, Tc')                | [7]      |
| pJE193        | pSR47S::ΔmaA(BAA-1790) allele exchange construct                           | This work|
| pJE195        | pSR47S::ΔdsbA(BAA-1790) allele exchange construct                          | This work|
### Oligonucleotide primers

| Primer name | Sequence (5’ – 3’; restriction site underlined if present) | RE site(s) |
|-------------|-------------------------------------------------------------|------------|
| **Complementation and localization experiments**            |                                                             |            |
| dsbA-F      | CGAGCTCTAGAGGAAAAAGCTGTAACATGAAA                           | SacI       |
| dsbA-R      | AAAACTGCAGGCAATTAAACTATTATTATTCTGCTAC                     | PstI       |
| lon-F       | CGAGCTCATTAGGAGTGCCCATGCTG                                | SacI       |
| lon-R       | AAAACTGCAGGCAATTATGAGCCGCCTGCTTTTG                       | PstI       |
| gtrOC3-F    | CGAGCTCCTAAAGGACGTTATAAGTTTATGAAAT                     | SacI       |
| gtrOC3-R    | AAAACTGCGAGGCTGCTACTATTATTATTCTGCTAC                     | PstI       |
| gtrOC4-F    | CGAGCTCCTAAAGGACGTTATAAGTTTATGAAAT                     | SacI       |
| gtrOC4-R    | AAAACTGCGAGGCTGCTACTATTATTATTCTGCTAC                     | PstI       |
| gtr6-F      | CGAGCTCTAGGTTACTATAGGAAAATGGATG                         | SacI       |
| gtr6-R      | AAAACTGCGAGGCTACTATTATCTATTAGTACA                       | PstI       |
| itrA-F      | CGAGCTCAGACTGTTCAGCGAATTTATTA                           | SacI       |
| itrA-R      | TGTACTGCAAGCGGCTACTGGTAAACTG                            | PstI       |
| maA-F       | CGAGCTCATTAGGAGTAAGCAGCATTAAAAA                         | SacI       |
| maA-R       | AAAACTGCGAGGCTTCTGCTATTATAACTGGCCT                       | PstI       |
| **Gene deletion**                                         |                                                             |            |
| gtrOC4-upF  | ACGCGTGCAGCTGGCCGAGTTTTGGCTTATC                         | Sall       |
| gtrOC4-upR  | GGGGTACCTGGAACATTTCTAAGCTTGCCTAC                       | KpnI       |
| gtrOC4-downF| GGGGTACCTGGAACATTTCTAAGCTTGCCTAC                       | KpnI       |
| gtrOC4-downR| AAAATATGGCGGCGCTCAGTGTAGCGCTCTTTGCCGTT                 | NotI       |
| gtr6-UP-F   | ACGCGTGCAGCTGGCCGATCGACTTCTAGGG                         | Sall       |
| gtr6-UP-R   | GGGGTACCTGGAACATTTCTAAGCTTGCCTAC                       | KpnI       |
| gtr6-DOWN-F | GGGGTACCTGGAACATTTCTAAGCTTGCCTAC                       | KpnI       |
| gtr6-DOWN-R | AAAATATGGCGGCGCTCAGTGTAGCGCTCTTTGCCGTT                 | NotI       |
| Dlon-upF    | GGATCTCTAGGCGGCTTCTTACG                                  | BamHII     |
| Dlon-up R   | GGATCTCTAGGCGGCTTCTTACG                                  | KpnI       |
| Dlon-downF  | GGTACCAGCGCCGACGTACTATTC                                 | KpnI       |
| Dlon-downR  | GGTACCAGCGCCGACGTACTATTC                                 | KpnI       |
| maA-UP-F    | ACGCGTGCAGCGCATGTAATTCTAAGCTTAC                         | Sall       |
| DmaA-UP-F   | ACGCGTGCAGCGCATGTAATTCTAAGCTTAC                         | Sall       |
| maA-UP-R    | ACGCGTGCAGCGCATGTAATTCTAAGCTTAC                         | KpnI       |
| maA-DOWN-F  | GGGGTACCTGGAACATTTCTAAGCTTAC                            | KpnI       |
| maA-DOWN-R  | AAAATATGGCGGCGAGAAGCAGAAGAAGAAGAAGAAGA                  | NotI       |
| Dslt-upF    | CACCTGATCCAGGTGCTCTACCAGCATACTAC                      | BamHII     |
| Dslt-upR    | CATAGGTACCTTCTCAGACCATACGCTCTCTCGGCG                  | KpnI       |
| Dslt-downF  | GTCGGTACCGCGAGCAGTCATACGTACGCTCTCTC                   | KpnI       |
| Dslt-downR  | ATCTTGCGGCGGCGATTCCAGCGTCTGCTGCGGCG                   | NotI       |
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