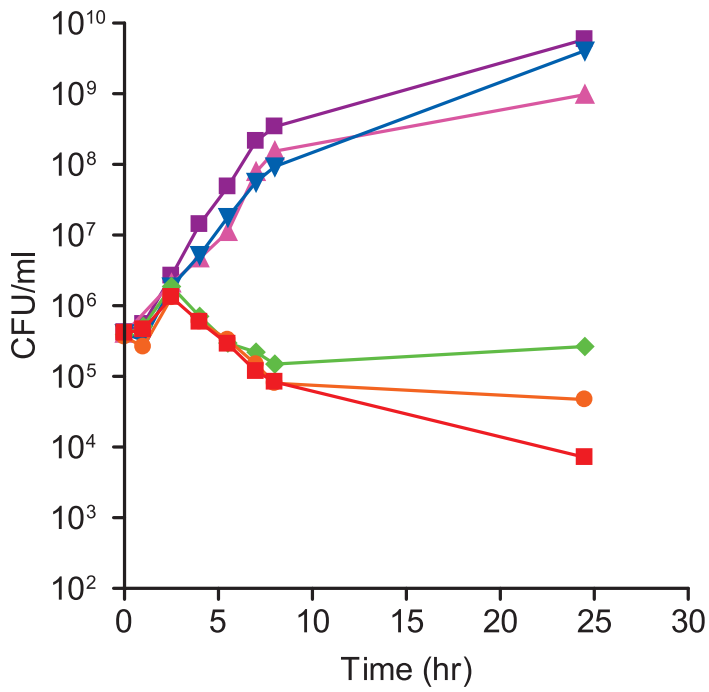
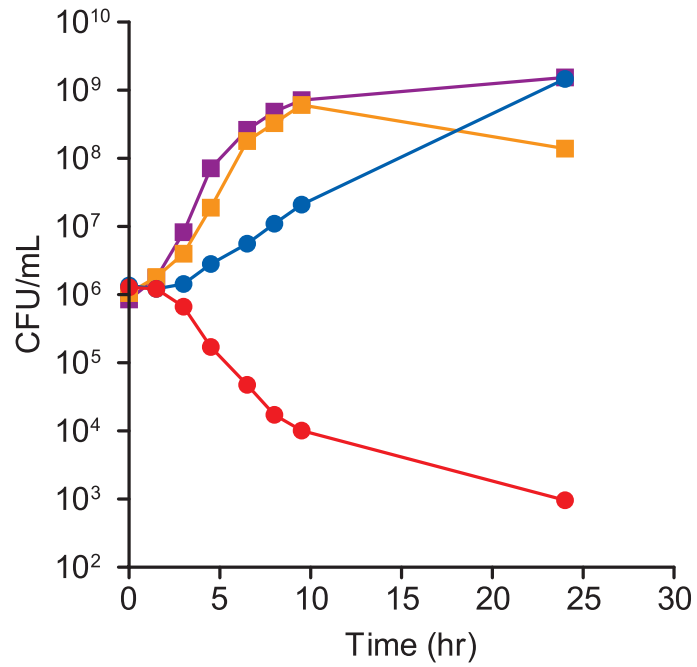


- A**
- Vehicle
  - ▼ KRS 2  $\mu\text{g/ml}$
  - ▲ IPM 2  $\mu\text{g/ml}$
  - ◆ IPM 2  $\mu\text{g/ml}$  + KRS 1  $\mu\text{g/ml}$
  - IPM 2  $\mu\text{g/ml}$  + KRS 2  $\mu\text{g/ml}$
  - IPM 2  $\mu\text{g/ml}$  + KRS 4  $\mu\text{g/ml}$



- B**
- Vehicle
  - IPM 4  $\mu\text{g/mL}$
  - ACT 1  $\mu\text{g/mL}$
  - IPM 4  $\mu\text{g/mL}$  + ACT 1  $\mu\text{g/mL}$



**Supplementary FIG. 1. Overexpression of SpsB in MRSA strain COL.** Plasmid pTET10-bearing strains were incubated in the presence of the tetracycline analog anhydrotetracycline (ATc) to induce *spsB* gene expression. (A) Susceptibility to M131 was measured with the standard broth dilution assay – MIC of SpsB-expression strain (blue bars) and the vector-control strain (red bars). (B) Measurement of SpsB expression with Western Blot analysis using a rabbit anti-SpsB antibody demonstrates increased expression in response to aTc treatment. (C) Measurement of SpsB enzyme activity with the peptide cleavage assay.

**Supplementary FIG. 2. Combinations of imipenem with krisynomycin (KRS) (A) and actinocarbasin (ACT) (B) with the kill-curve technique.** Imipenem was tested at 2 or 4 µg/mL; the concentrations of krisynomycin and actinocarbasin were varied. Each agent was also tested singly. Compounds were combined with cell culture and sample aliquots were taken for viable counts at time intervals.