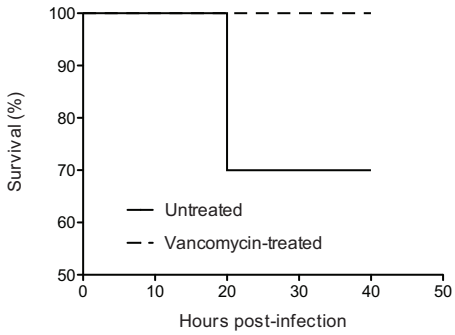
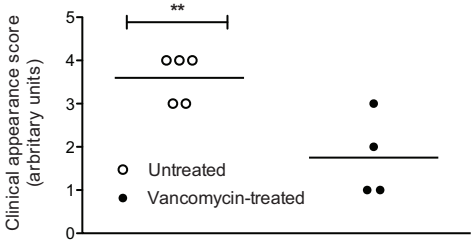
preclin biosystems

your partner in drug validation




## Staphylococcus aureus:

Staphylococcus aureus is a gram-positive bacteria responsible for diseases from superficial skin lesions through to severe urinary tract infections, pneumonia and meningitis. Common portals of entry of S. aureus are breaks in the skin such as surgical wounds or by passage through the respiratory tract. Frequently this pathogen is controlled at the site of infection by innate host defense; however, severe complications including dissemination of S. aureus into the blood stream can cause sepsis and death. Transmission of the bacteria commonly occurs through human- to- human contact, often at hospitals and particularly in immunocompromised individuals. Until recently, penicillin or a penicillin-like antibiotic has been the most frequent treatment targeting S. aureus infection. A key problem is that many S. aureus strains have become resistant against the antibiotic treatments currently on the market. As such, there is an urgent need to find novel treatment regimes and strategies for protection against S. aureus.

## Experimental readouts:

- Bacterial load in tissue
- Morbidity and mortality
- Inflammatory cell analysis
- Quantitative PCR analysis of tissue cytokines and chemokines

## Duration:

1-10 days dependent upon experimental readouts

**Service Package I is available alone, or in combination with Service Packages II and III**

Our scientific project managers can provide expert advice and guidance for all of your efficiacy studies.

**Please contact us for customized Service Packages**
info@preclinbiosystems.com

### Service Package I

- Administration of test compounds
- Initiation of disease model
- Determination of bacterial load in tissue

### Service Package II

- Measurement and analysis of cellular infiltrates
- Morbidity and mortality

### Service Package III

- Quantitative PCR analysis of tissue cytokines and chemokines