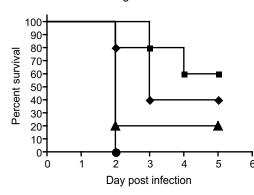


# your partner in drug validation

## Klebsiella pneumoniae:

Klebsiella pneumoniae is one of the most common pathogens causing community-acquired respiratory infections, which are particularly devastating in immunocompromised patients where mortality rates can range between 25-60%. It is a gram-negative encapsulated bacteria that can cause a range of infections from urinary tract infections to pneumonia. A lack of control of K. pneumoniae can lead to systemic dissemination of the bacteria and sepsis. K. pneumoniae effectively evades humoral immunity by altering its polysaccharide capsular antigens, but some data indicates that Th17 driven inflammation might be effective in controlling the bacteria. Increasingly antibiotic resistant K. pneumoniae strains are being detected, and new therapeutics that target this bacteria are needed.

Survival following Klebsiella infection



- --- 1x10<sup>5</sup> K. pneumoniae
- → 1x106 K. pneumoniae
- 1x10<sup>7</sup> K. pneumoniae
- → 1x108 K. pneumoniae

# 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