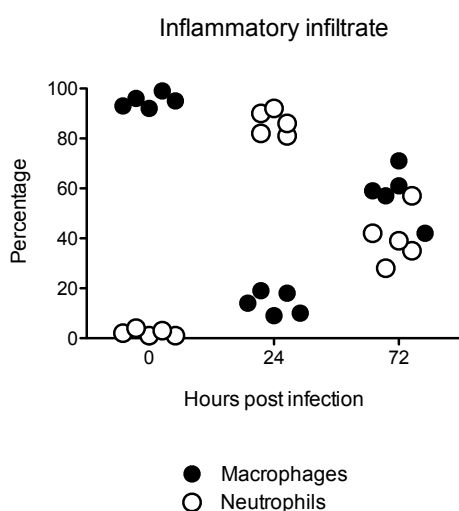


Streptococcus pneumoniae:

Streptococcus pneumoniae (*S. pneumoniae*) is a common source of respiratory illness and a major cause for invasive diseases, such as pneumonia, meningitis or sepsis. *S. pneumoniae* is a gram-positive bacteria enveloped by a capsule composed of polysaccharides, which play an essential role in the bacteria's virulence. The bacteria is classified into more than ninety different capsular serotypes and is also known as Pneumococcus. Particularly affected by infection are children and elderly people, as well as individuals with a compromised immune system. Current treatment regimes are antibiotics (Penicillin and its derivatives) or conjugate vaccines covering several bacterial serotypes, which are specifically utilized for children's vaccinations. However, increasing incidences of penicillin-resistance pneumococcal strains and the emergence of new strains, which have not been targeted by the conjugate vaccines, highlight the necessity for novel treatment approaches.



Experimental readouts:

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

Duration:

3-10 days dependent upon experimental readouts

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

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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