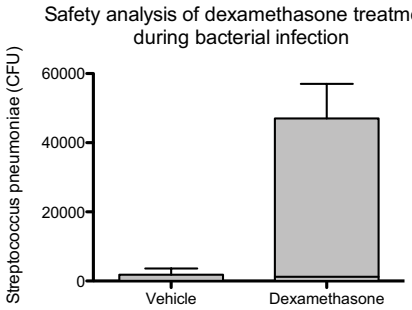
preclin biosystems

your partner in drug validation



Safety assessment:

There is a clear need for novel and effective therapeutics against inflammatory diseases indeed, this is a core focus of the biotechnology and pharmaceutical industry. Often the molecular targets of anti-inflammatory drugs play roles in multiple inflammatory disorders and thus there is the potential for using a single drug in multiple disease indications. Successful off-label usage of drugs has highlighted this point. However, it is important to acknowledge that impairing an individuals immune system, and thus alleviating inflammatory diseases, might lead to undesirable side-effects such as increased susceptibility to infectious disease. Preclinical in vivo safety studies can be performed in order to assess possible side effects of drug candidates. An example of such a study includes treating mice with a general immunosuppressant e.g. dexamethasone, during a bacterial infection and assessing whether this treatment impairs the host-immune response against the infection (see figure). An alternative scenario could include immuno-potentiating drugs or adjuvants, and assessment of whether their proinflammatory activity leads to an increased prevalence or severity of disorders such as rheumatoid arthritis or colitis. The broad array of preclinical inflammatory and infectious disease models offered by Preclin Biosystems opens the opportunity for not only assessing the efficacy of novel drug candidates, but also their safety.

Experimental readouts:

- Disease incidence
- Morbidity and mortality
- Inflammatory cell analysis
- Measurement of cytokines and chemokines

Duration:

Dependent upon model and 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 disease severity

Service Package II

- Measurement and analysis of cellular infiltrates
- Morbidity and mortality

Service Package III

- Analysis of tissue cytokines and chemokines