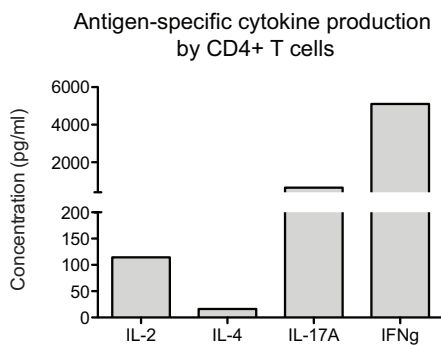
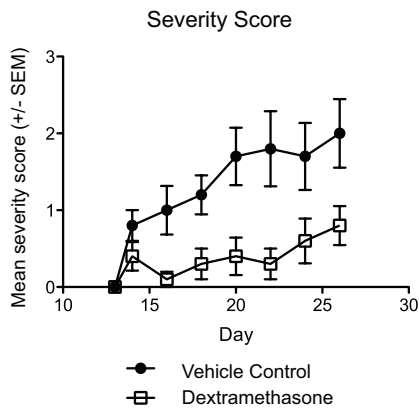


Multiple sclerosis:



Multiple sclerosis (MS) is an inflammatory neurodegenerative disorder that affects more than one million people worldwide. The disease is characterized by the destruction of the myelin sheath in the central nervous system (CNS), causing sensory loss and compromised motor function. Activated myelin-specific T cells crossing the blood-brain barrier play a central role in the pathogenic process, which is accompanied by the expression of numerous pro-inflammatory factors, such as $IFN\gamma$, $TNF\alpha$, $IL-1\beta$, $IL6$, $IL-17$, and $TGF\beta$. The predominant therapeutics currently on the market are type I interferon blockers, which act as immune modulators, and inhibitors of the adhesion molecule VLA-4, which prevent the infiltration of inflammatory cells into the CNS. However, not all patients respond sufficiently to treatment regimes and some experience side effects, which underline the need for alternative treatments. Experimental autoimmune encephalomyelitis (EAE) is a well-characterized murine model of MS in which the disease is induced by the active immunization of myelin-derived antigens. This produces symptoms that resemble MS, such as infiltration of inflammatory cells into the CNS and demyelination.

Experimental readouts:

- Disease severity score
- Histological analysis
- T cell effector function analysis
- Quantitative PCR analysis of tissue cytokines and chemokines

Duration:

20-60 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 efficiency studies.

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

Service Package I

- Administration of test compounds
- Initiation of disease model
- Severity scoring

Service Package II

- Histological analysis
- T cell effector function

Service Package III

- Quantitative PCR analysis of tissue cytokines and chemokines