

Streptococcal cell wall (SCW) Arthritis in Rats

Streptococcal cell wall (SCW) arthritis in rats is an experimentally-induced inflammatory model with many features that resemble rheumatoid arthritis (RA) in humans. A single intraperitoneal injection of group-A streptococcal peptidoglycan-polysaccharide (SCW-PG-PS) cell wall fragments induces an initial acute, followed by a chronic inflammatory phase. This model is good for the evaluation of therapeutic compounds on the acute and chronic arthritis studies.

Induction of Arthritis

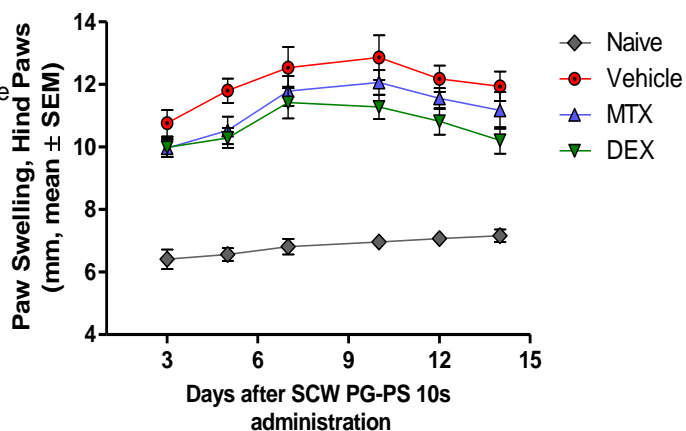
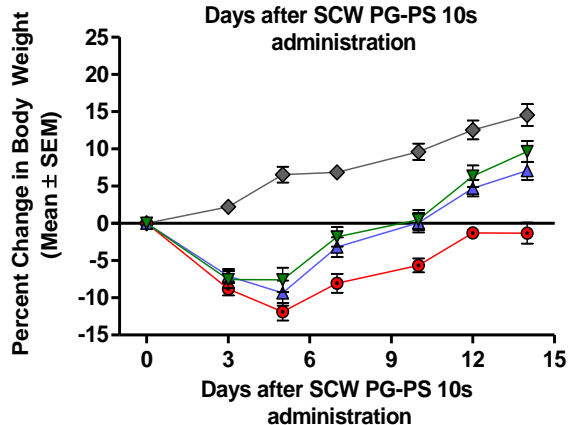
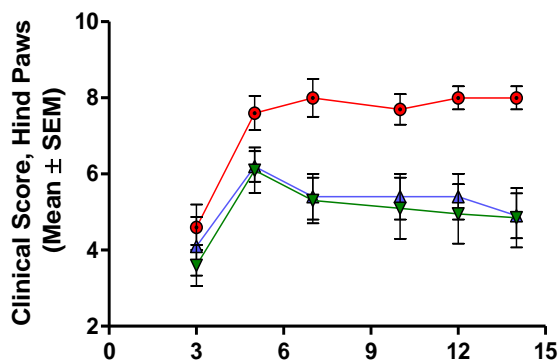
The polyarticular arthritis is induced by intra-peritoneal injection of PG-PS 10S in female Lewis rats, resulting in an acute inflammatory response and swelling of the joints. The joint inflammation progresses during the first 5-7 days and is followed by a period of remission, after which spontaneous reactivation occurs, resulting in chronic arthritis.

Timeline: Approximately 2-4 weeks are required to complete a 14 days treatment study and submit a report.

Observation: Clinical evaluation
Body weight
Paw thickness and ankle diameter
Serum collection and cytokines analysis
Histology of hind paws

Report: Report includes detail procedure, appropriate analysis and raw data .

Development of Arthritis



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