

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

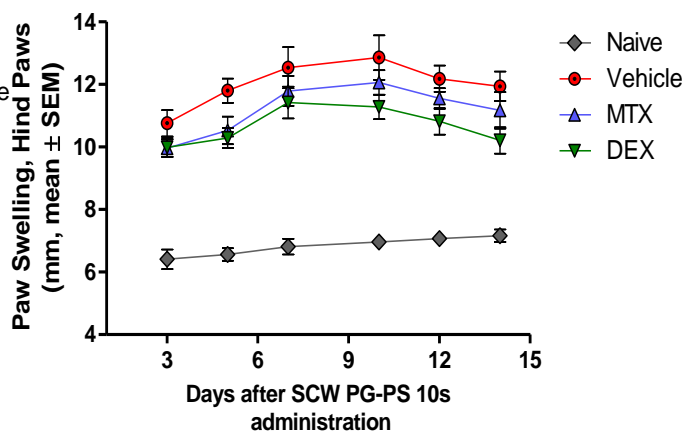
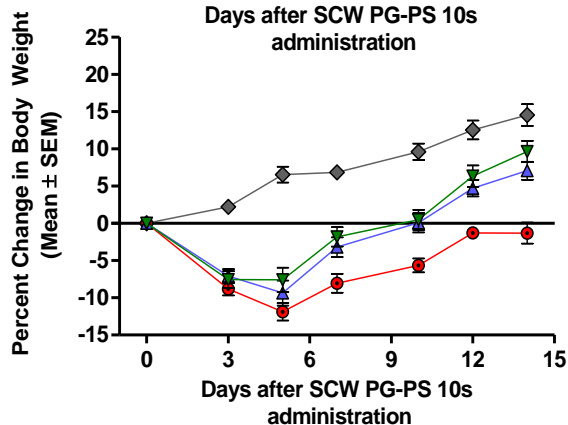
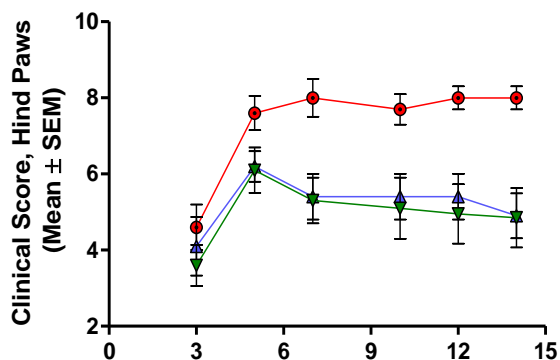
The polyarticular arthritis is induced by intra-peritoneal injection of PG-PS 10S in female Lewis rats, resulting in an acute inflammatory response and swelling of the joints. The joint inflammation progresses during the first 5-7 days and is followed by a period of remission, after which spontaneous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



IMPORTANT: Our services are responsive to client needs, customizing protocols, fast results, expert consultation and flexibility. Invitek intends to expand with new therapeutic areas, models, and assays, contact us to discuss your specific needs.