medical labs

Collagen Antibody-induced Arthritis

The Collagen Antibody-Induced Arthritis (CAIA) model presents a valuable alternative to the CIA, significantly reducing the study duration and cost while increasing disease induction and synchronicity among individual animals. This model enables the study of compounds typically in a 12–18 day protocol with either a therapeutic or prophylactic regimen. The short study duration also means that smaller studies can be performed with results that would be available to plan and perform a nextstep study in short intervals. The ArthritoMab™ Antibody Cocktail consists of four monoclonal antibodies to CII, 3 of which are IgG2b isotypes that induce stronger arthritis. The ability to induce arthritis using an antibody cocktail to CII provides an efficient protocol as an alternative to the lengthy CIA and the variable K/BxN models.

Experimental Overview

Dexamethasone is administered via oral gavage (PO) on days 0-12. Clobestasol is admininstered topically on front and hind paws.

Animal Strain: Balb/c

Study Duration: 12 days

Controls: Dexamethasone

Clobetasol (topical)

Standard Clinical observations

Paw thickness Assessments:

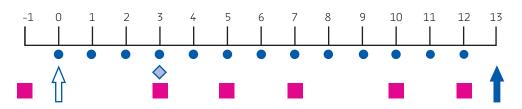
Body weight Serum collection

Add-on Flow cytometery

Assessments: Histology

Biomarkers

Experimental Schematic



Anti collagen mAb injection (i.v.)

LPS injection (i.p.)

Dexamethasone (PO) and clobetasol treatment (topical)

Treatment

- Clobetasol administered 1x daily, 2hrs post IMQ
- Dexamethasone administered 1x daily



Paws collected, fixed or frozen

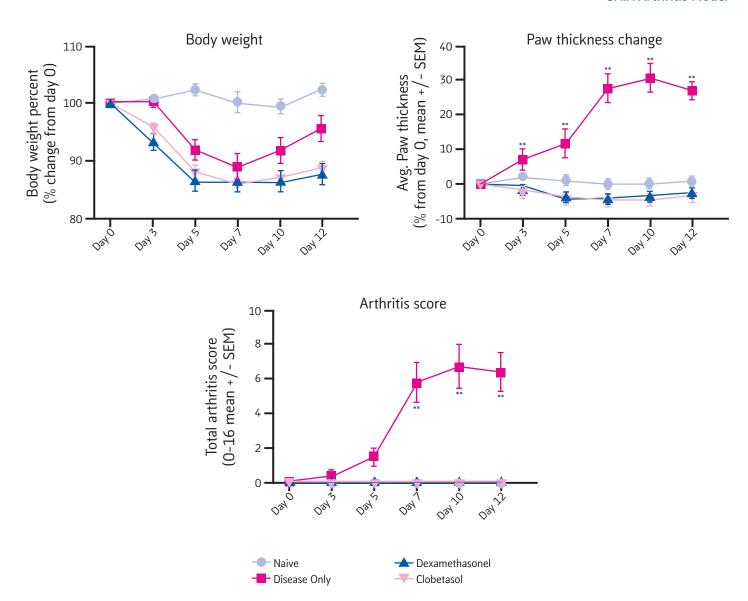


Figure 1: Clinical Observations
Body weight, paw thickness and total arthritis score was recorded on Days 0-12. *p>0.01,
Two-Way ANOVA.

Our Clients Say ...

"The performance of your team far exceeded our expectations. The study was performed well and we appreciate all your input into the study design. Your responsiveness and feedback during the study and following in the data interpretation was extremely helpful to guide our next steps. That's something we don't find with every CRO."

S.G., Toxicologist, Biotech Company

"Of all the CROs that I have used over the years...
MLM Medical Labs been one of the very best in terms of scientific knowledge, data quality, time-lines, flexibility and personal contacts."

O.B., Director of Therapeutics, Pharmaceutical Company

"Throughout our relationship, you have been attentive to our needs and have completed exploratory pilot studies and three drug studies with professionalism and an understanding of tight biotech timelines that are unmatched by other CROs."

D.Z., Director of Therapeutics, Biotech Company

About MLM Medical Labs

MLM Medical Labs is a leading specialty and central laboratory with comprehensive research services and analytical capabilities in Europe and the United States. Offering standard and fully customizable biological specimen testing and auxiliary logistics services across a wide spectrum of therapeutic areas, we add value at every stage of the product development process, from nonclinical and preclinical through phase IV clinical trials that serve to augment and accelerate research programs to their next stages and milestones. Each disease area is supplemented extensively by different models and batteries of in vitro and ex vivo analyses, offering answers to your therapeutics' effect on different parameters. With our strong reputation for scientific expertise, passionate approach to customer care, and adherence to quality data, we empower clients ranging from emerging biotech to Top Ten Global Pharma companies to reach confident clinical decisions that ultimately serve to improve patient lives.

If you'd like to discuss a particular study or speak with a scientist, please reach out to us!

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