

Rat TNBS-induced Inflammatory Bowel Disease

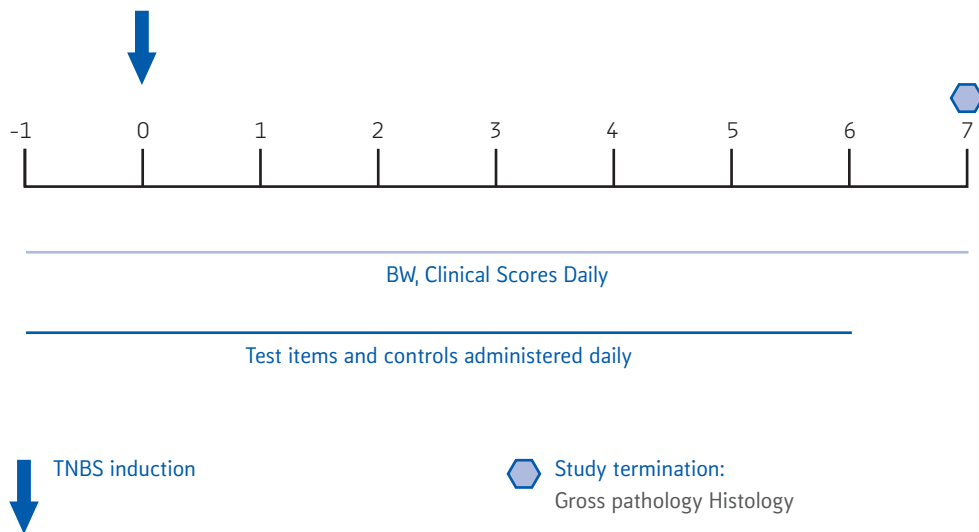
TNBS-induced intestinal inflammation is commonly used in rats as a model for IBD, particularly in reference to Crohns disease (CD). In this 7 day TNBS model, disease is induced through intrarectal administration of TNBS to produce clinically amenable indicators to that of CD such as diarrhea, rectal bleeding, body weight loss, more diffuse intestinal inflammation, occasional adhesions, fibrosis and vascularized ulceration. The TNBS model of IBD is pathologically driven by Th1/Th17 dependant mechanisms.

Experimental Overview

IMQ cream is applied to the shaved back and onto the right ear daily. Positive control and test items are administered according to the client's criteria. Ear thickness, clinical score and body weight are measured per the schematic below.

Animal Strain:	SD Rats
Study Duration:	7 Days
Positive Controls:	Anti-P40
Standard Assessments:	Colitis Clinical Score Gross Pathology Body Weight
Add-on Assessments:	Biomarker Analysis Colon Explant Histology

Experimental Schematic



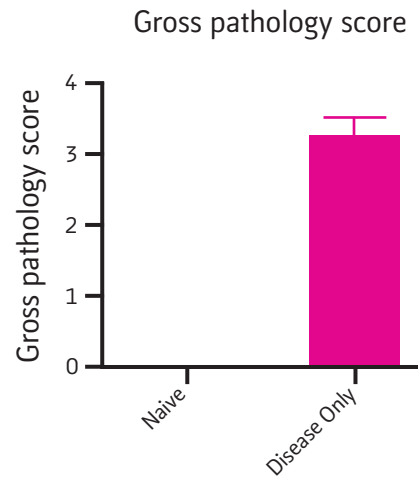
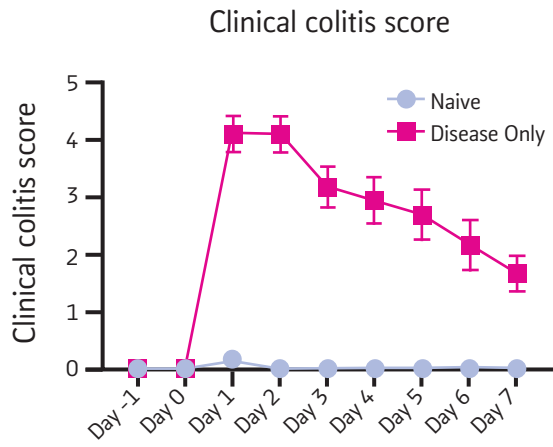


Figure 1: Clinical Colitis Score in TNBS treated rats

Figure 2: Gross Pathology Score of colon from TNBS treated rats

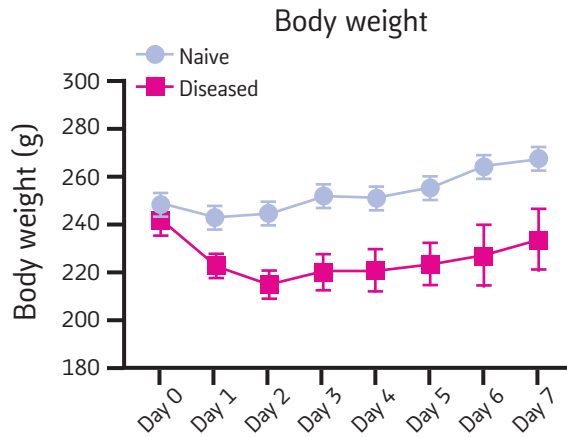


Figure 3: Body Weight of TNBS treated rats

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, timelines, 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 diagnostic capabilities in Europe and the United States. Offering a range of standard and fully customizable analytical services across a variety of therapeutic areas, we add value at every stage of the drug development process from non-clinical/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!

info@mlm-labs.com
+1 (651) 641 1770
+49 (2161) 4642 108