

Mouse TNBS-induced Inflammatory Bowel Disease

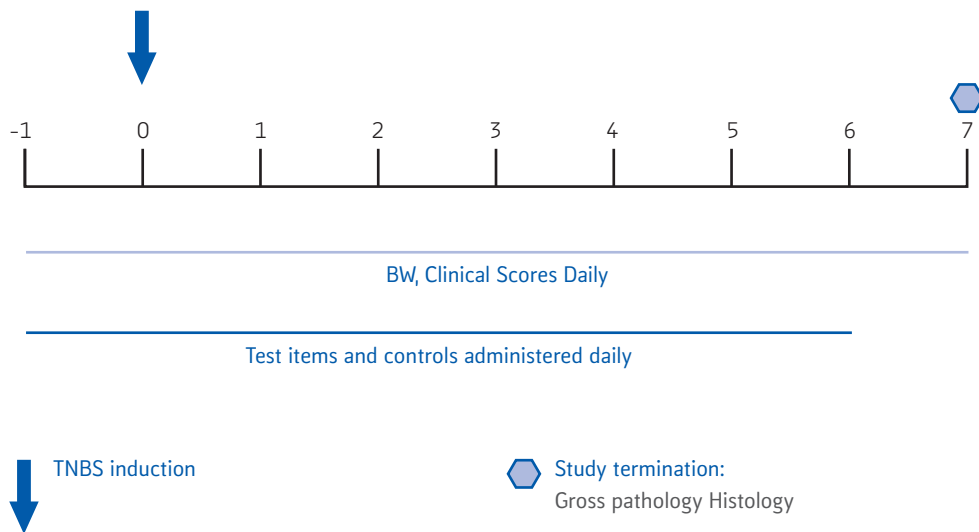
TNBS-induced intestinal inflammation is commonly used in mice as a model for IBD, particularly in reference to Crohns disease (CD). In this 7 day TNBS model, disease is induced through intrarectal administration of TNBS to produce clinically amenable indicators to that of CD such as diarrhea, rectal bleeding, body weight loss, more diffuse intestinal inflammation, occasional adhesions, fibrosis and vascularized ulceration. These indications can all be significantly reduced via a one-time i.p. injection of anti-p40 antibody. The TNBS model of IBD is pathologically driven by Th1/Th17 dependent 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:	Balb/c Mouse
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



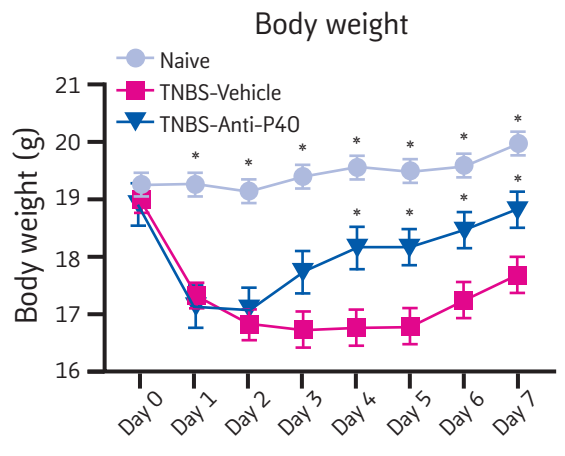


Figure 1: Body Weight of TNBS treated mice. * represents $p < 0.05$ in comparison to vehicle.

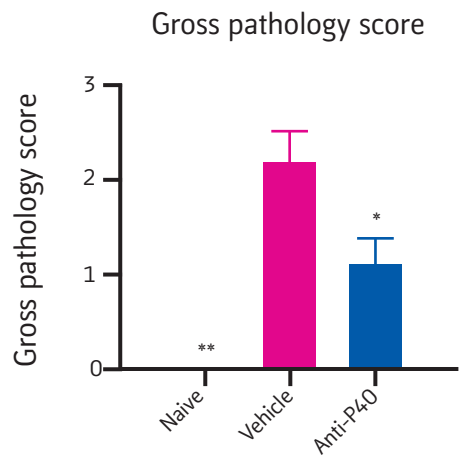


Figure 2: Gross Pathology Score of colon from TNBS treated mice. * represents $p < 0.05$ in comparison to vehicle.

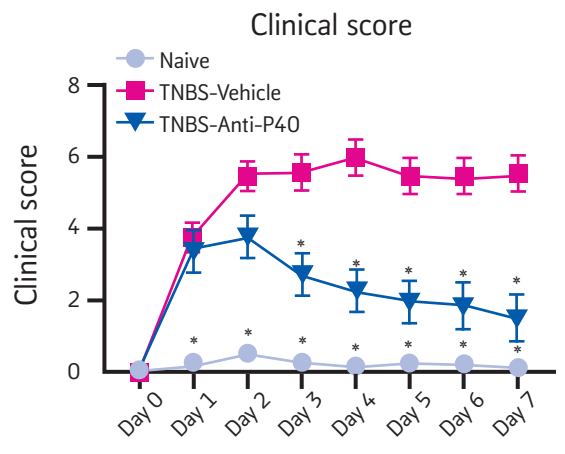


Figure 3: Clinical Colitis Score in TNBS treated mice. * represents $p < 0.05$ in comparison to vehicle.

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

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

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