



# CBI

## Fibrosis Models in Mice

Comparative Biosciences, Inc.  
786 Lucerne Drive  
Sunnyvale, CA 94085  
Telephone: 408.738.9260  
[www.compbio.com](http://www.compbio.com)



**COMPARATIVE BIOSCIENCES, INC.**  
A TRANSLATIONAL APPROACH TO PRECLINICAL RESEARCH

# COMPARATIVE BIOSCIENCES, INC.

## Premier Preclinical Contract Research Organization

- **Nearly 20 years** of experience
- Conveniently **located in the heart of Silicon Valley**, amidst many biotech companies
- **State of the art, purpose-built facility**
- Approximately **30 employees**
- **Highly experienced staff**
- **GLP, OECD, FDA, USDA, OLAW**
- **AAALAC Accreditation**



# Murine Fibrosis Models

- Sclerotic Skin (Scleroderma)
  - Local Repeated Injection of Bleomycin
- Pulmonary Fibrosis
  - Continuous SC Infusion of Bleomycin by Osmotic Pump



# Sclerotic Skin Model

Study Parameters and Sample Data



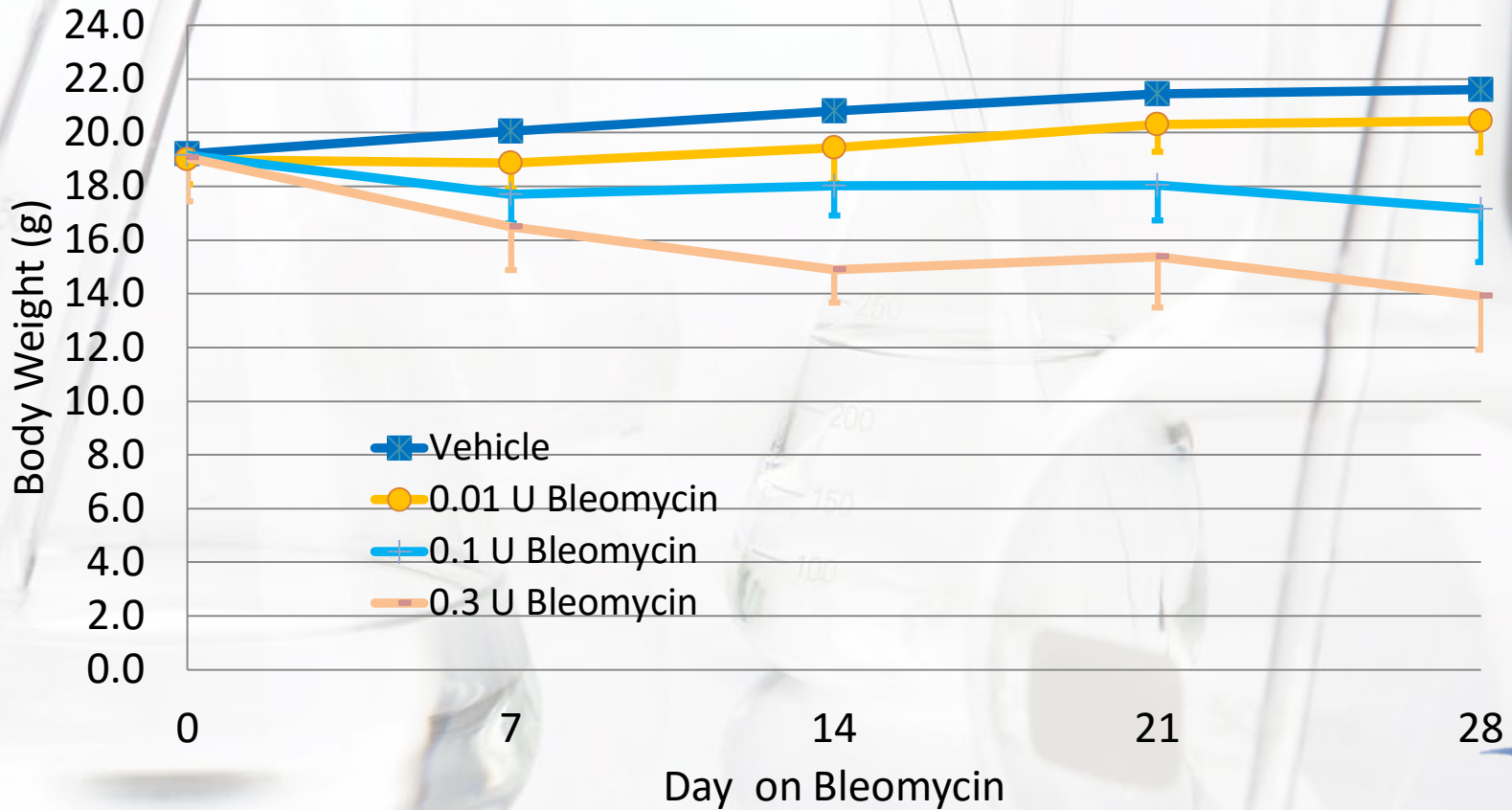
## Sclerotic Skin Model: Typical Parameters

- C3H females at 7 weeks of age
- Local SC injection of bleomycin daily for 30 days
- Test article administration per sponsor
- Clinical observation daily
- Weekly body weights
- Necropsy and histopathology



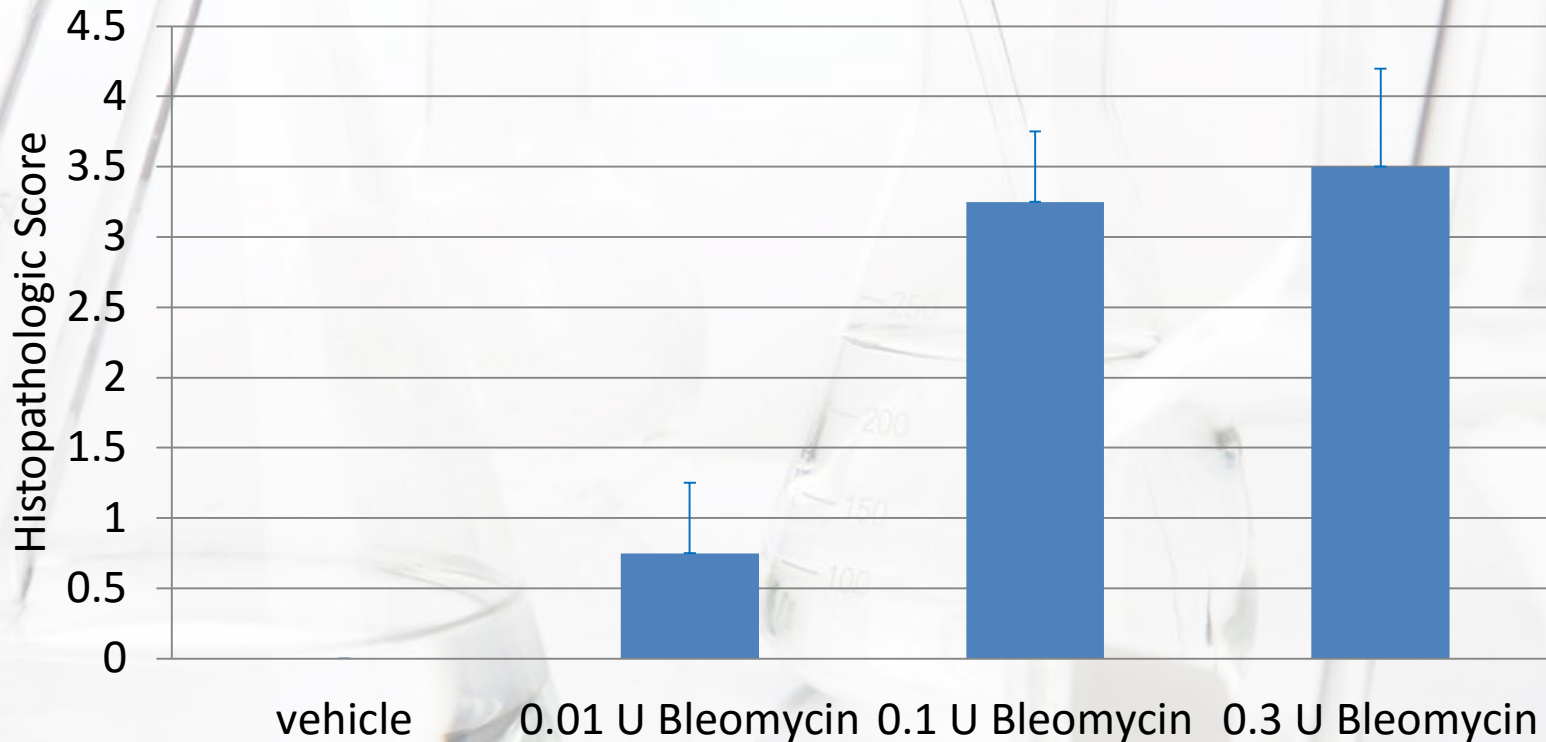
# Sclerotic Skin Model: Sample Data

Body Weights (C3H/HeOuJ)

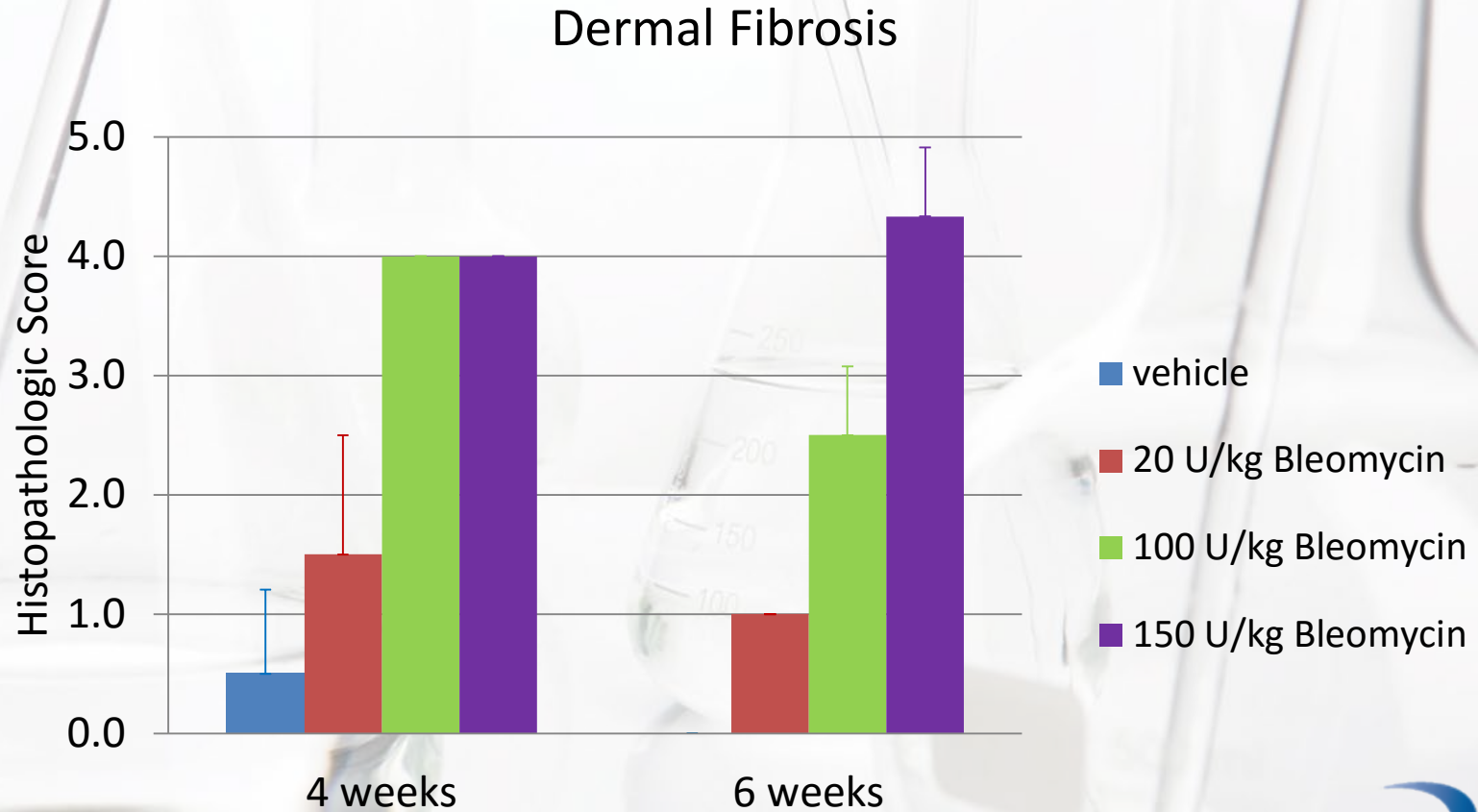


# Sclerotic Skin Model: Sample Data

Dermal Fibrosis (C3H/HeJ)

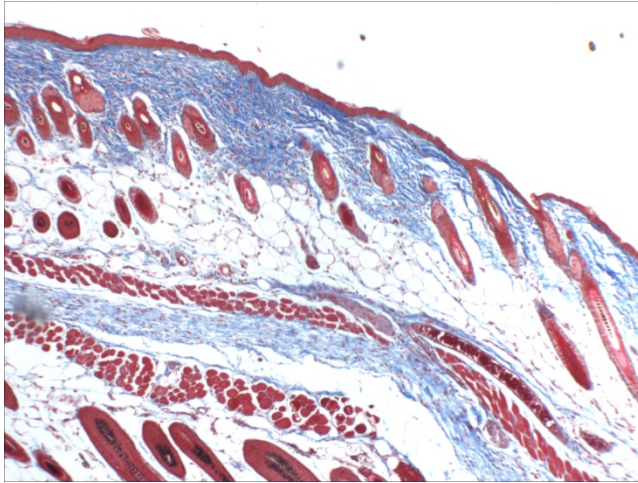


# Sclerotic Skin Model: Sample Data



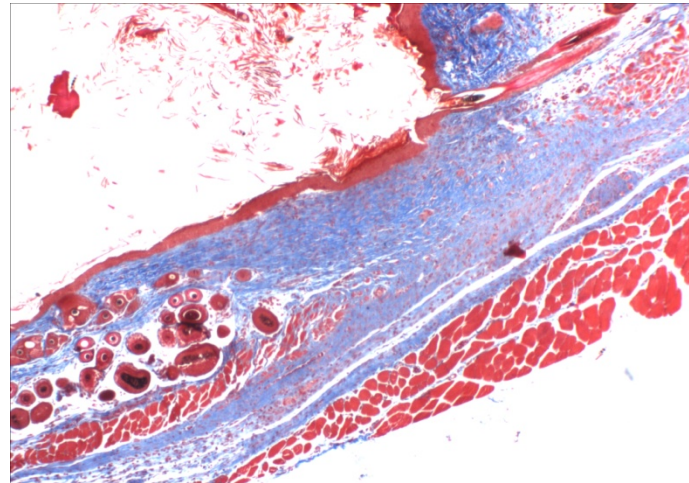
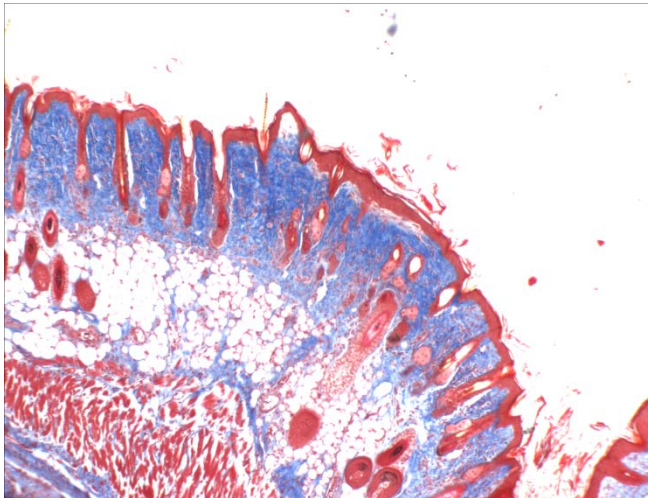


# Sclerotic Skin Model: Histopathology



Left: Trichrome of normal mouse skin, demonstrating low amount of collagen in superficial dermis (blue)

Bottom: Bleomycin-treated mouse skin demonstrating large amount of collagen deposition and fibrosis in superficial and deep dermis (blue)



# **Pulmonary Fibrosis Model**

Study Parameters and Sample Data



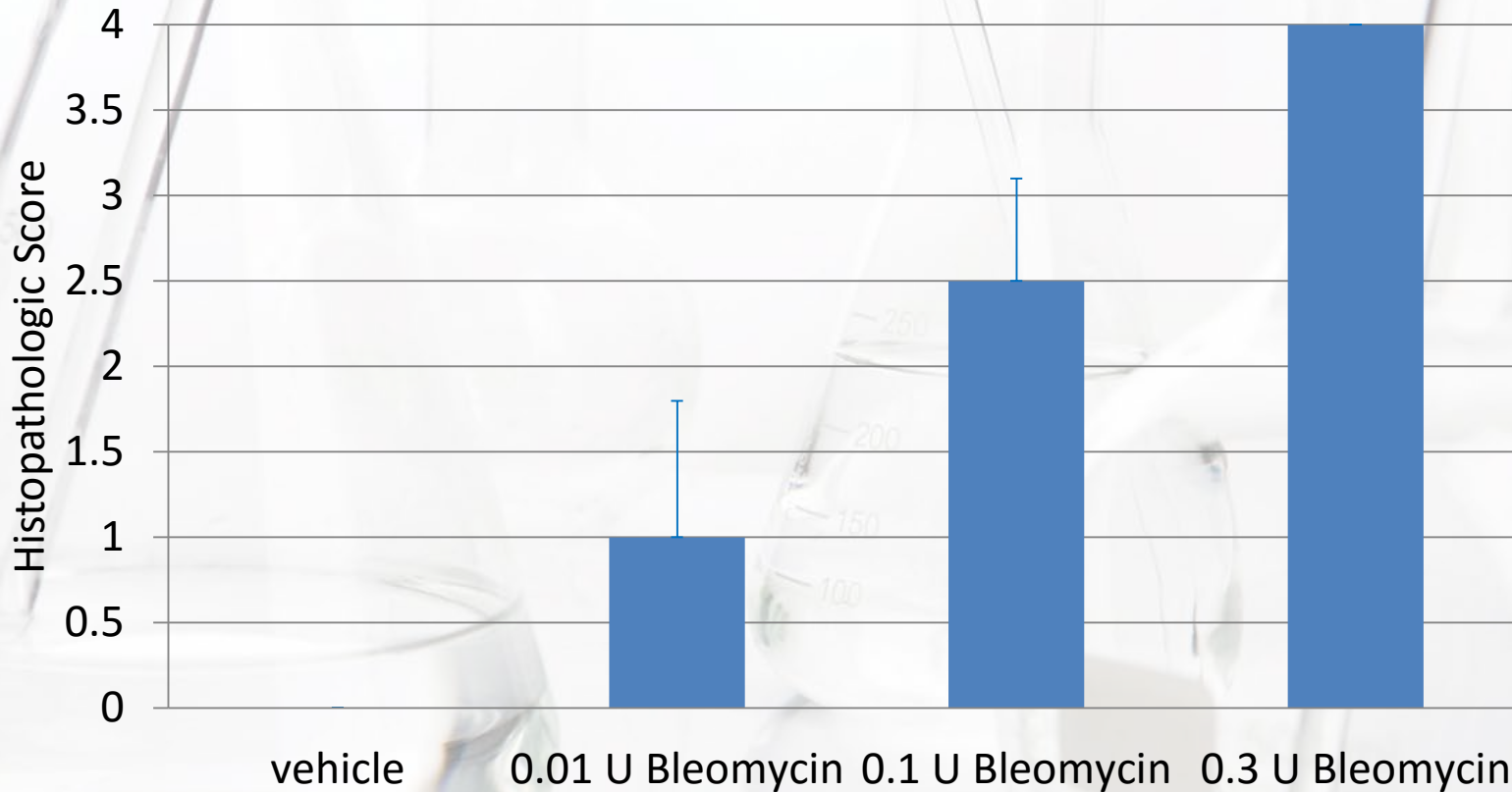
## **Pulmonary Fibrosis: Typical Parameters**

- C57BL/6 females at 7 weeks of age
- Surgical implantation of osmotic pump with 7 day constant infusion of bleomycin
- Clinical observation daily
- Body weights weekly
- Necropsy and histopathology

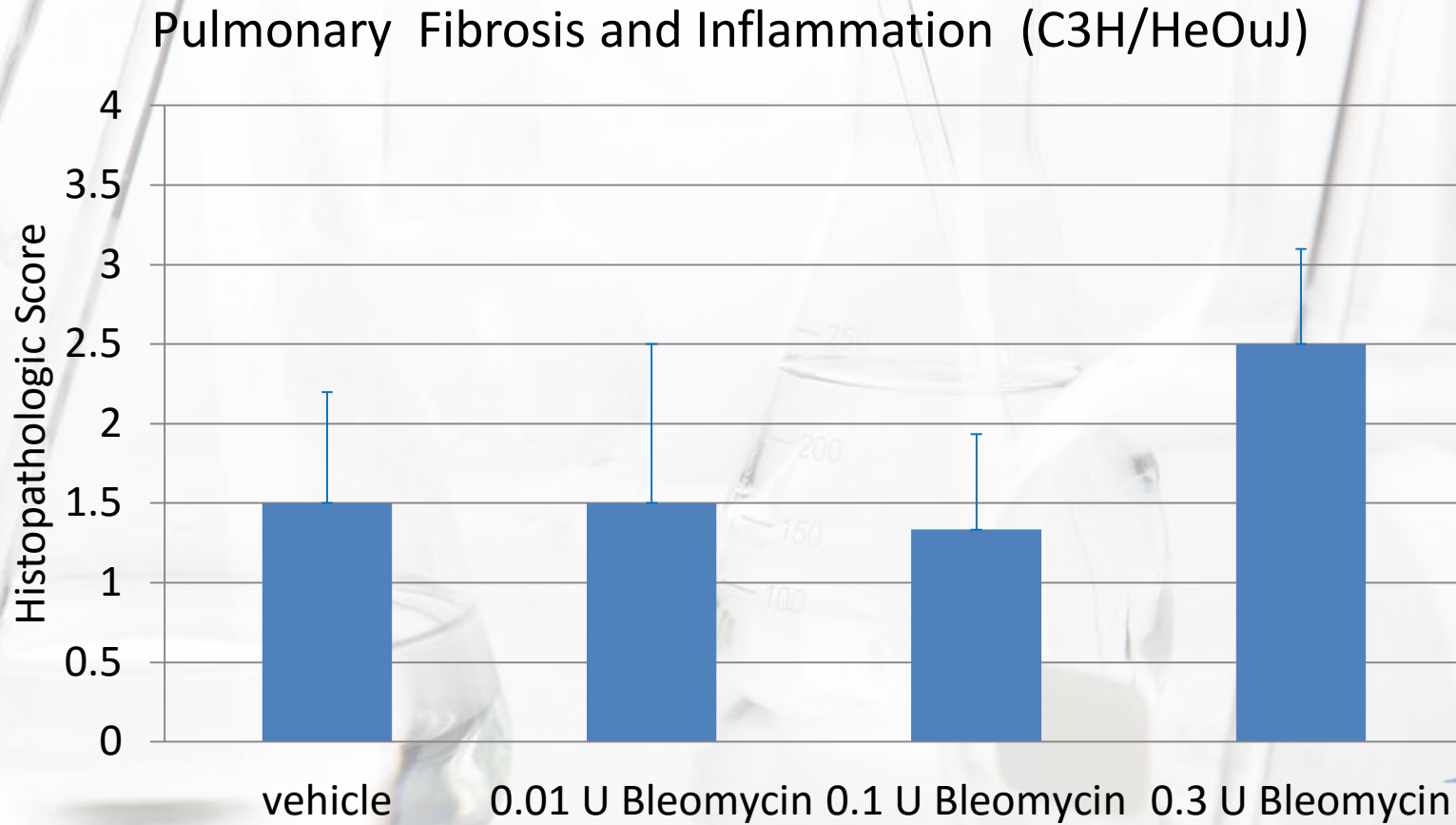


# Pulmonary Fibrosis: Sample Data

Pulmonary Fibrosis and Inflammation (C3H/HeJ)

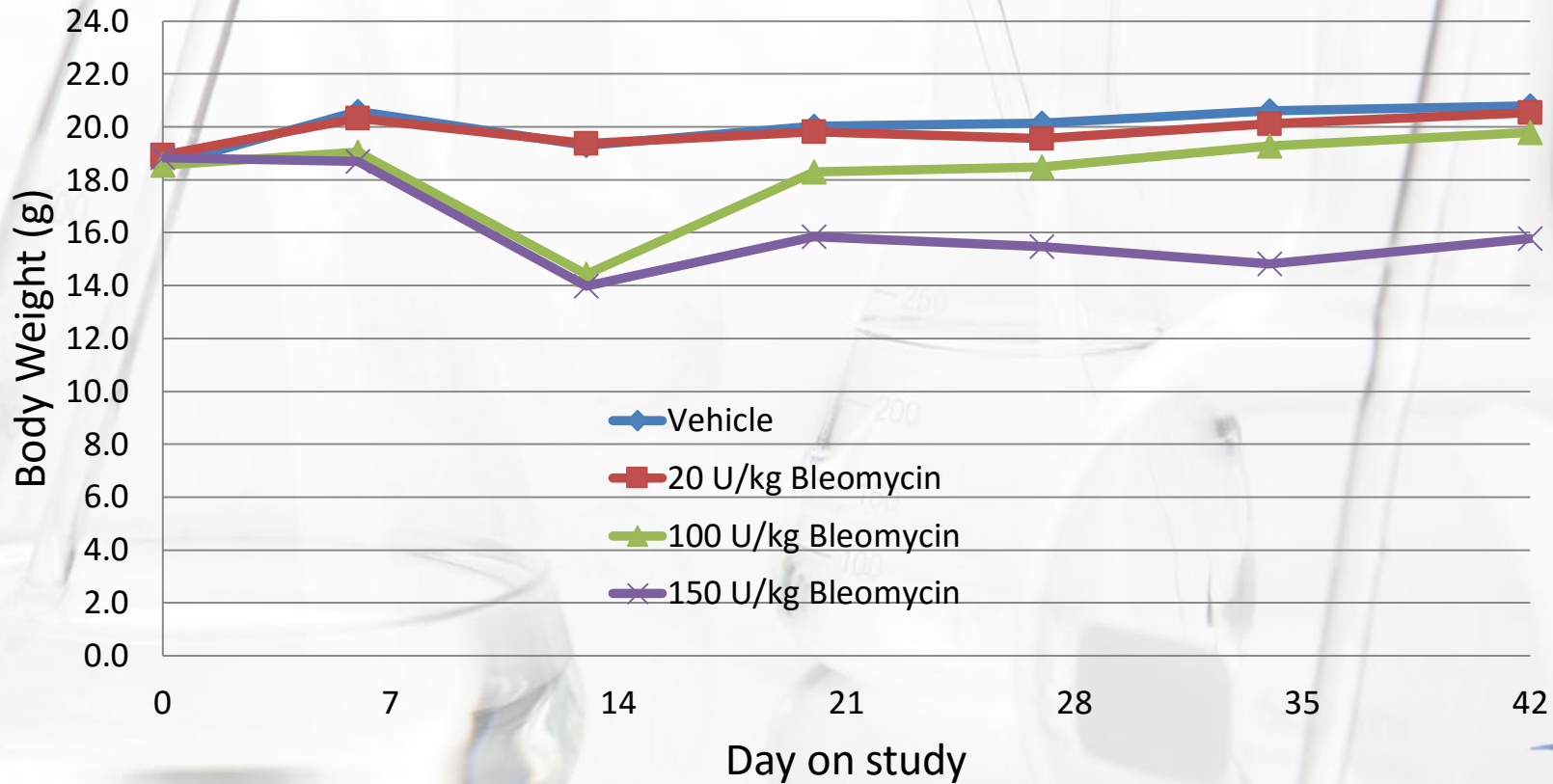


# Pulmonary Fibrosis: Sample Data



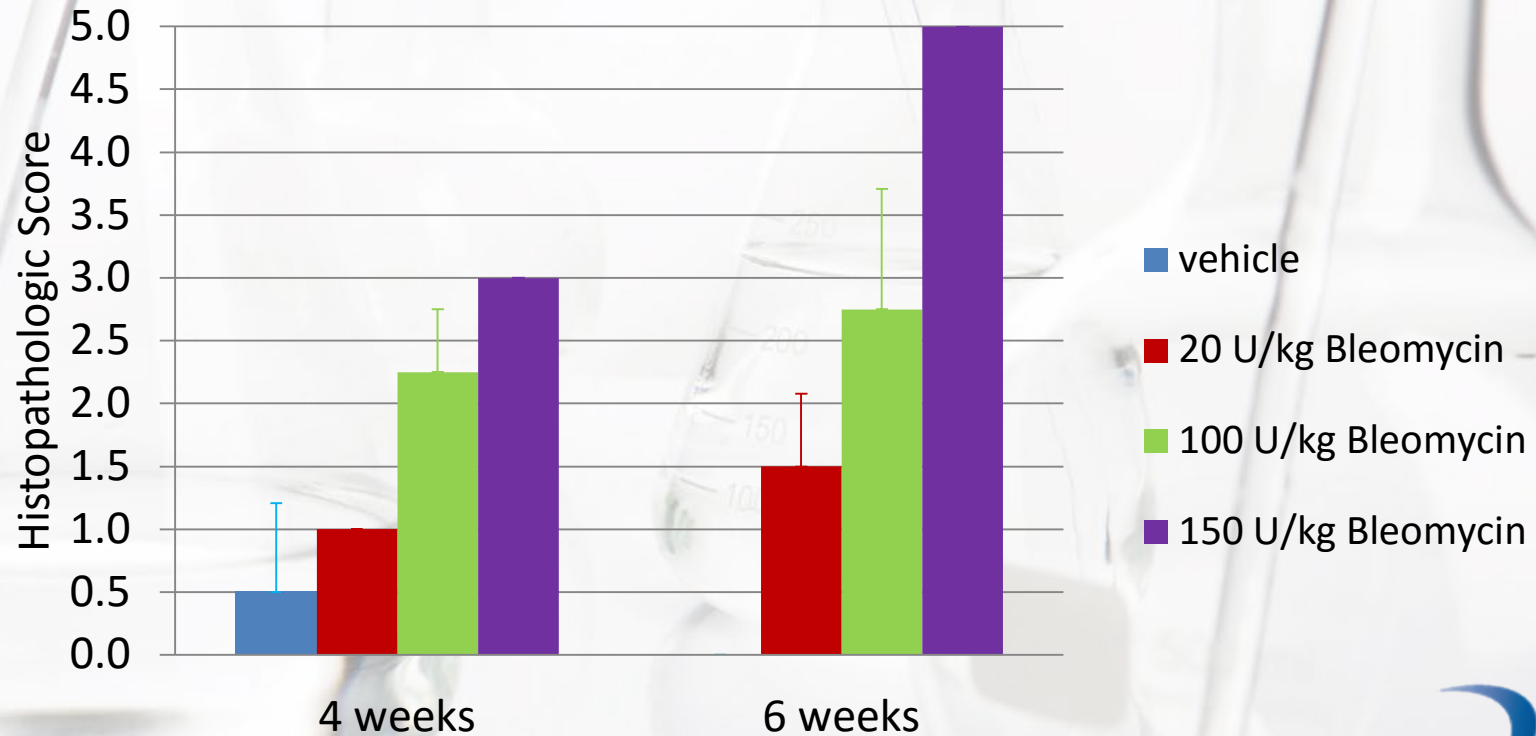
# Pulmonary Fibrosis: Sample Data

Body Weights in Bleomycin-treated Mice

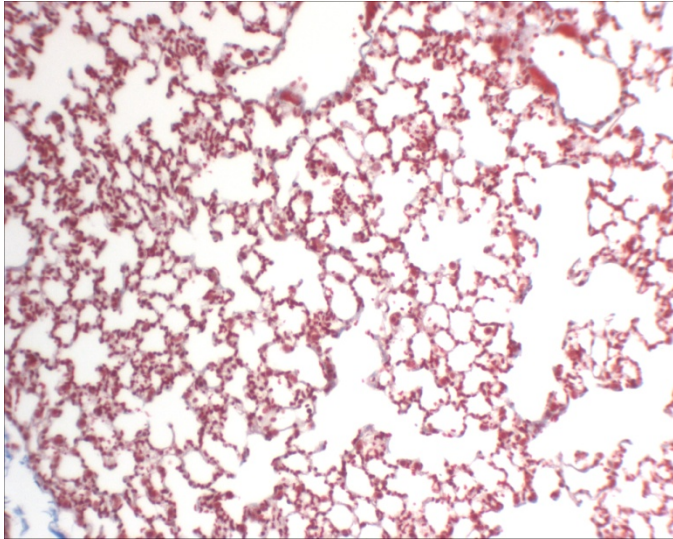


# Pulmonary Fibrosis: Sample Data

## Pulmonary Fibrosis and Inflammation

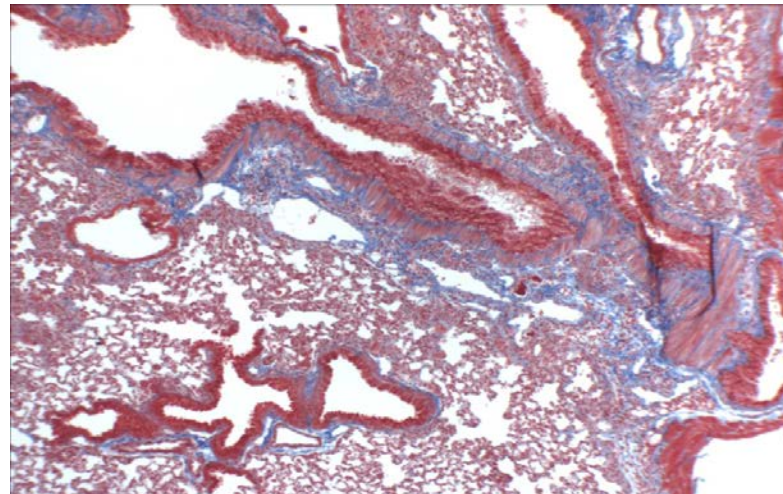
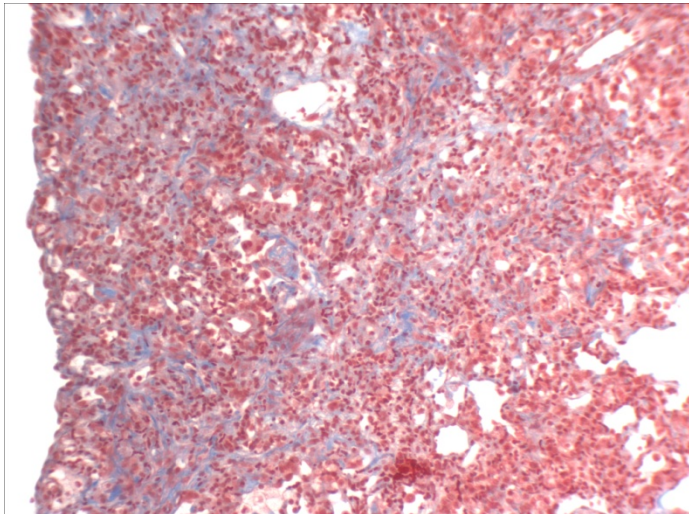


# Pulmonary Fibrosis: Histopathology



Left: Trichrome of normal mouse lung, demonstrating little or no collagen (blue)

Bottom: Bleomycin-treated mouse lung demonstrating large amounts of collagen deposition and fibrosis in pulmonary parenchyma and around air ways





## Service and Quality

- ***Thoroughness in planning and execution is key to a successful study.*** All protocols are vetted and approved by multiple personnel. Our QAU has a rigorous training program. All non-GLP studies are conducted in the spirit of GLP.
- ***We believe in sound science.*** Our ratio of scientists to non-scientists is one of the highest in the industry. Every study director is a PhD-level scientist.
- ***We believe in communication.*** Timely responses to your inquiries and frequent updates on your study are mandatory.
- ***We welcome visitors.*** You are always welcome at CBI to meet the staff, tour the laboratory and discuss the progress and results of your study.

