



CBI

Murine Eosinophilic Esophagitis at CBI

Comparative Biosciences, Inc.
786 Lucerne Drive
Sunnyvale, CA 94085
Telephone: 408.738.9260
www.compbio.com



COMPARATIVE BIOSCIENCES, INC.
A TRANSLATIONAL APPROACH TO PRECLINICAL RESEARCH

Eosinophilic Esophagitis at CBI

- CBI provides a well characterized murine model of eosinophilic esophagitis
 - Female BalbC Mice
 - Sensitization and Induction with intranasal *Aspergillus fumigatus* protein antigen administered under anesthesia
 - 3x weekly for 3 weeks
 - Sacrifice at 3 weeks
 - Twice weekly body weights
 - Hematology
 - BAL lung lavage
 - Histopathologic examination of lungs and esophagus
 - Dexamethasone positive control

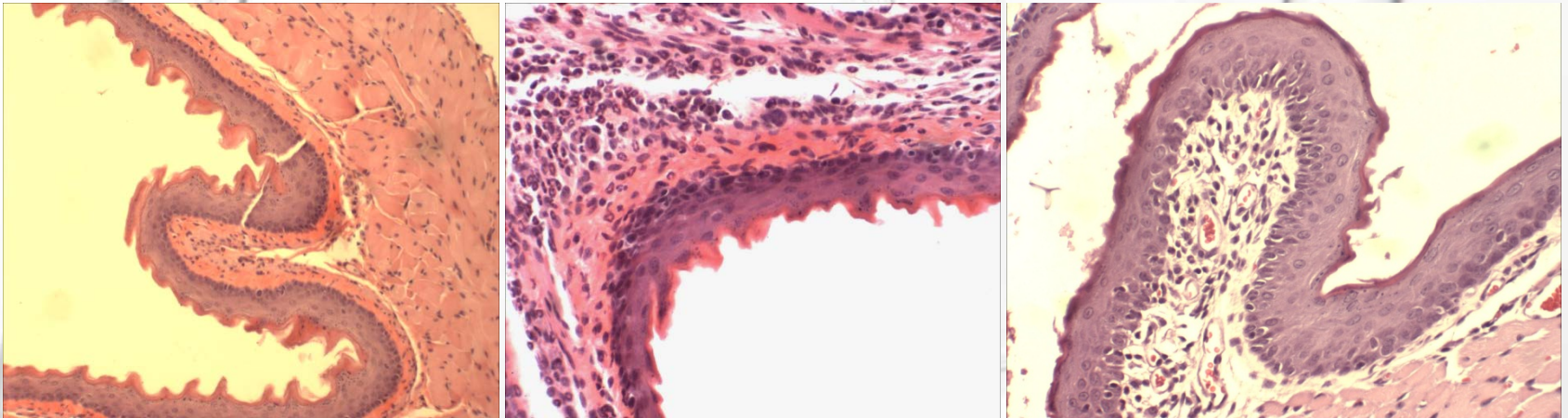


Eosinophilic Esophagitis at CBI

- **Hematology** : Changes not significant and generally within normal limits
- **Body weight**: Consistent between vehicle and dexamethasone treated mice
- **BAL**: Large numbers of inflammatory cells, primarily granulocytes, eosinophils and pulmonary macrophages, were present in the BAL fluid indicative of a consistent, reproducible inflammatory response of the lungs to the A.F. sensitization.



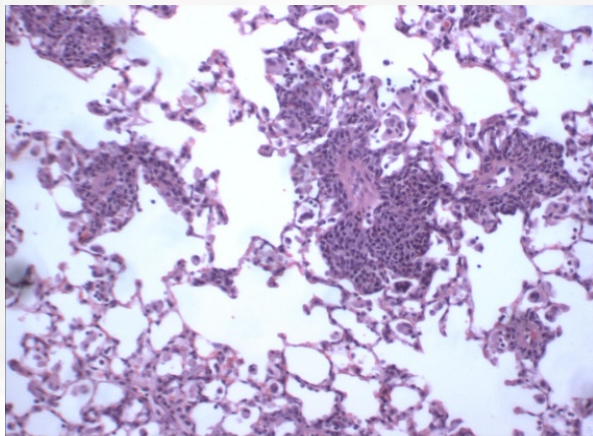
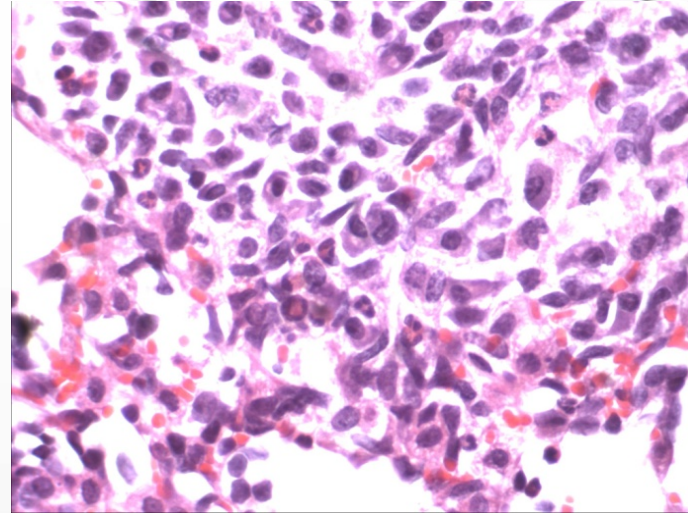
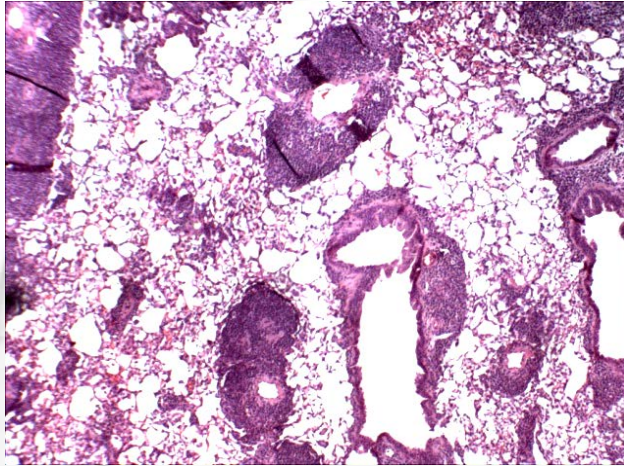
Esophageal Histology



- Left: normal esophagus
- Middle: Moderate eosinophilic inflammation
- Bottom: Reduced inflammation following dexamethasone treatment



Pulmonary Histology



- Top left: Severe multifocal chronic eosinophilic inflammation.
- Top right: Pulmonary eosinophilic and lymphocytic inflammation
- Lower left: Moderate inflammation in dexamethasone-treated mice



Summary

- CBI offers a validated murine model of eosinophilic esophagitis
 - Produces a reliable pulmonary and esophageal eosinophilic inflammation
 - Dexamethasone shown to be effective positive control drug
- At CBI:
 - Protocol driven
 - Histopathology-ACVP pathologist-all histology conducted in house
 - High quality reports
 - Prompt time lines
 - Solid validation data

