

In Vivo Models

Active Biotech has a long experience in experimental *in vivo* models of inflammation, autoimmunity and cancer. The BioScience Department has supported projects from pre-clinical to clinical phase within several therapeutic areas.

One of the biggest strengths of Active Biotech is the close link between the different disciplines within the company. Studies in disease models can therefore be seamlessly coupled to other key competencies critical for drug development, e.g. pharmacokinetics and bioanalysis.

Our *in vivo* studies are carried out in modern animal facilities by our experienced pharmacologists. Breeding and experiments in immuno-compromised animals are performed behind barrier. All studies are approved by the local ethical committee of animal welfare.

We offer high quality studies, including expert interpretation and reporting of data, in a variety of *in vivo* models. We work closely with you to develop protocols with dedicated and customized readouts. In addition, a number of add-on services can easily be attached to the studies.



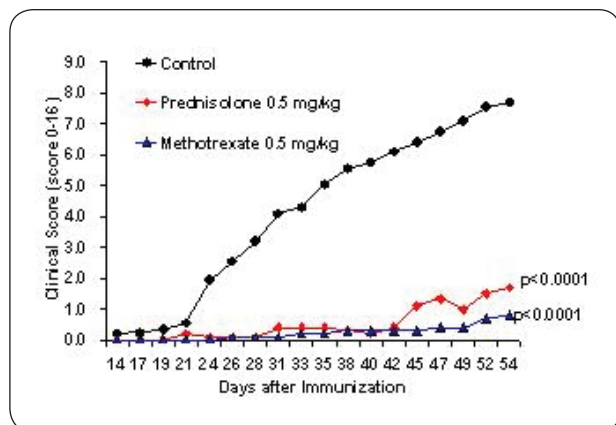
Inflammation & Autoimmune Models

Multiple Sclerosis (MS):

- Acute Experimental Autoimmune Encephalomyelitis (aEAE) in mice
- Chronic Experimental Autoimmune Encephalomyelitis (cEAE) in mice

Rheumatoid Arthritis (RA):

- Mouse Collagen Induced Arthritis (CIA)



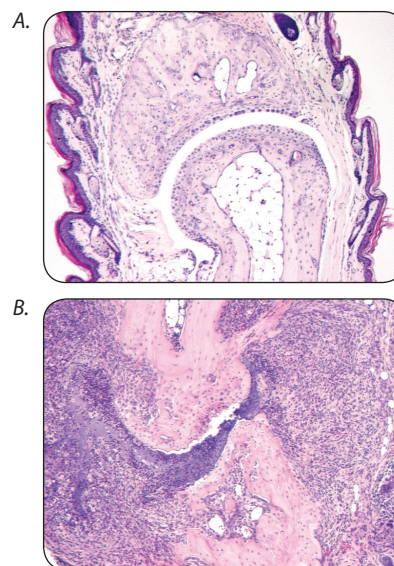
Collagen induced arthritis in DBA/1 mice treated with methotrexate or prednisolone. Disease severity was scored by observations of the paws.

Insulin-dependent diabetes mellitus (IDDM):

- Nonobese diabetic (NOD) mouse

General Models of Inflammation:

- Lipopolysaccharide (LPS) Induced inflammation in mice.



Histology of normal (A) and arthritic (B) joint.

Cancer Models

Xenogenic

We have subcutaneous, orthotopic and intraperitoneal xenograft models in immuno-compromised mice. Recording of tumor growth includes tumor size, metastasis and mortality.

Examples of our xenograft models:

- Human colon adenocarcinoma – Colo 205
- Human renal cell carcinoma – Caki-2
- Human non-small cell lung carcinoma – Calu-1
- Human prostate adenocarcinoma – LNCap

We also offer development of custom xenograft models for any tumorigenic cell line.

Syngeneic

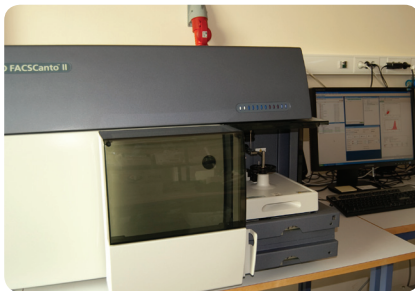
- B16F10 melanoma C57NL/16 mice
- EL4 lymphoma in C57BL/6 mice
- MC 38 colon carcinoma lymphoma in C57BL/6 mice

Administration Routes

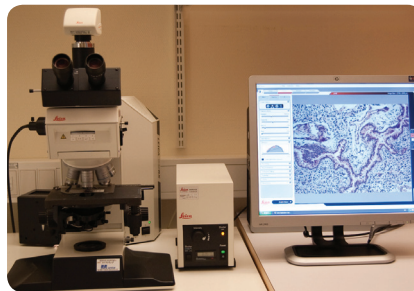
- Oral
- Intravenous
- Subcutaneous
- Intraperitoneal
- Intranasal
- Intratracheal

Add-on Services

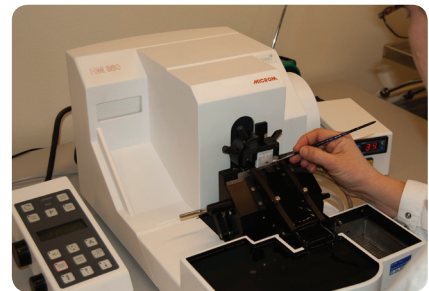
- Formulation and analysis of test material
- Pharmacokinetics
- Flow cytometry
- Histology and immunohistochemistry
- Serological analysis
- Cytokine analysis



BD FACS Canto™ II Flow Cytometry System equipped with 6-colour 2-laser system.



Leica Photomicroscope for light and fluorescence microscopy.



Microtome for specimens embedded in paraffin.