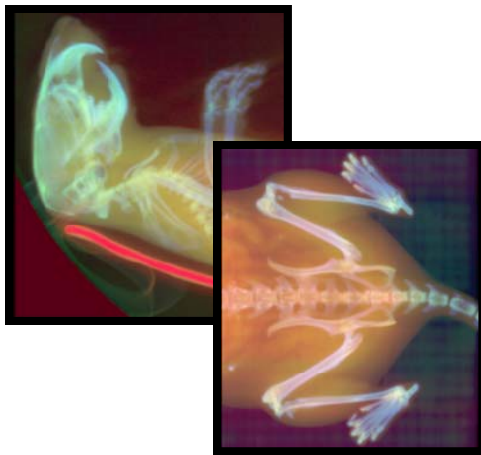


IN VIVO COMPUTED TOMOGRAPHY

MIR has two small animal micro-CT scanners on site (GE RS-150 and GMI XO™).

MIR's micro-CT systems can routinely achieve *in vivo* resolution up to 50 microns.



- optimization of throughput (20+ animals per day)
- validated, optimized procedures to maximize statistical power
- rapid reconstruction and quantification
- MIR proprietary scoring system in bone erosion models
- skilled, highly-trained imaging scientists undertake studies

VALIDATED PROTOCOLS

- imaging of bone metastasis in validated intracardiac and intratibial models
- response to therapy
- bone erosion and resorption*
- bone remodeling in validated mouse and rat models of arthritis*
- imaging of experimental CT contrast agents
- imaging of bone samples

* includes quantification of bone erosion using CT histogram and proprietary scoring system



Rheumatoid arthritis

MIR

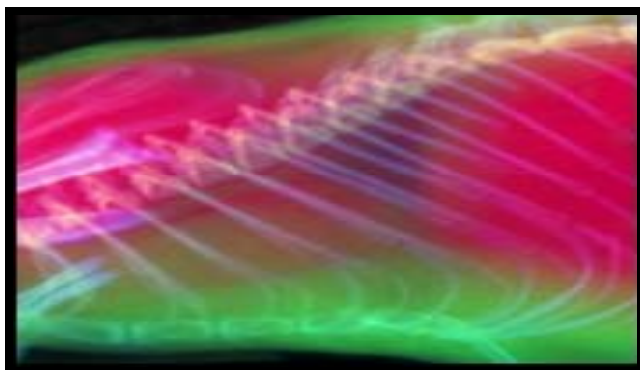
Innovation in Drug
Evaluation

MIR Preclinical Services



Bone Imaging

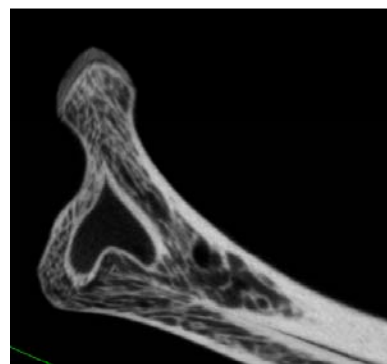
Micro-CT images of bone can be used to determine bone density and microstructure. Anatomical imaging can quantify bone remodeling and calcification. CT is the preferred translational (preclinical to clinical) technology for the quantification of tumor metastases in bone.



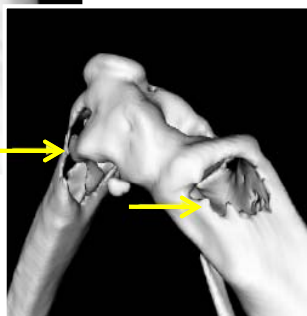
Soft Tissue Imaging

With the use of CT contrast agents, soft tissues can be imaged. Tissues may be distinguished by their differential uptake of contrast agent. X-ray tube voltage can be manipulated to maximize contrast.

Collagen-induced arthritis



PC-3 bone metastasis



High Throughput

MIR has also streamlined its image acquisition protocols and image post processing to generate high quality images quickly and cost effectively. A one week report turnaround is possible for imaging of bone samples.

Reports

MIR issues weekly updates during studies and strives to issue full, detailed reports within 5 weeks of the end of the in vivo portion of a study. In addition, clients receive all of the raw pharmacology and image data from studies.