

Osteoinduction and Osteoconduction testing is performed on new devices or biologically derived materials with the intended clinical use of replacing missing bone. This material can be artificial, synthetic or a natural material for xenograft, allograft or autograft applications. Sinclair Research now has available in-house testing methods designed to meet the research, product development and product release testing needs supporting the introduction of materials or devices into this market. Testing now available includes both gross and microscopic pathologic analysis to demonstrate osteoinduction or osteoconduction activity and to provide ISO 10993 biocompatibility testing services in the near future. Large animal orthopaedic models and device efficacy studies are also available. Expert consultation is available to help the sponsor meet regulatory requirements.

Models

- Osteoinduction and Osteoconduction bioactivity
- Bone fracture/critical size defects
- Mechanical/structural testing
- Joint/Cartilage Repair
- Spinal fusion/Instability

Models: Implant Sites

- Intramuscular
- Bone/Spine
- Subcutaneous
- Spinal fusion/Instability

Species

- Athymic rodents (Rats, mice)
- Canine
- Goat
- Rabbit (bridging models)
- Ovine
- NHP

Imaging Capabilities

- Digital Photography
- Angiography
- Spiral CT
- Doppler Ultrasound
- Fluoroscopy
- Radiography
- Micro CT

Histology/Pathology

- H&E staining
- Qualitative/Quantitative analysis
- Plastic Imbedding
- Board Certified Veterinary Pathologists

Supporting Facility & Equipment

- Dedicated surgical suites
- DEXA imaging
- Veterinary Surgeons
- 1.5 Tesla GE CT scanner