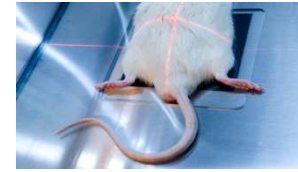


STUDY TITLE :

RAT EXPERIMENTAL MODEL OF OSTEOARTHRITIS



Protocol study



Age :

6 weeks old (upon delivery)

Sex :

Male

Strain :

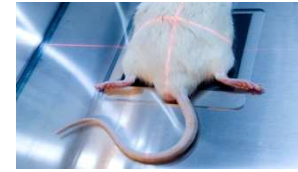
Sprague Dawley

Supplier :

Charles River Laboratories or Elevage Janvier



Experimental model

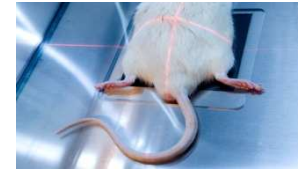


Induction of the pathology:

- ✓ Section of cruciate ligament of the right knee
- ✓ Osteoarthritis will start to develop 3 weeks later



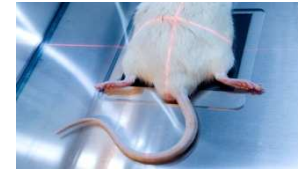
Treatment



- ✓ Any administration route
- ✓ Treatment to be defined with the sponsor (start and frequency of the treatment)

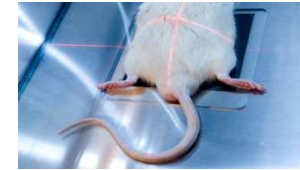


Clinical follow-up



- ✓ Weight evolution
- ✓ General state of the animal
- ✓ Walking troubles
- ✓ Qualitative study : Animal behaviour, reaction to pain

Radiological follow-up



- ✓ Evaluation of cartilage erosion= articular plucking
- ✓ Kinetic of radiographical analyses

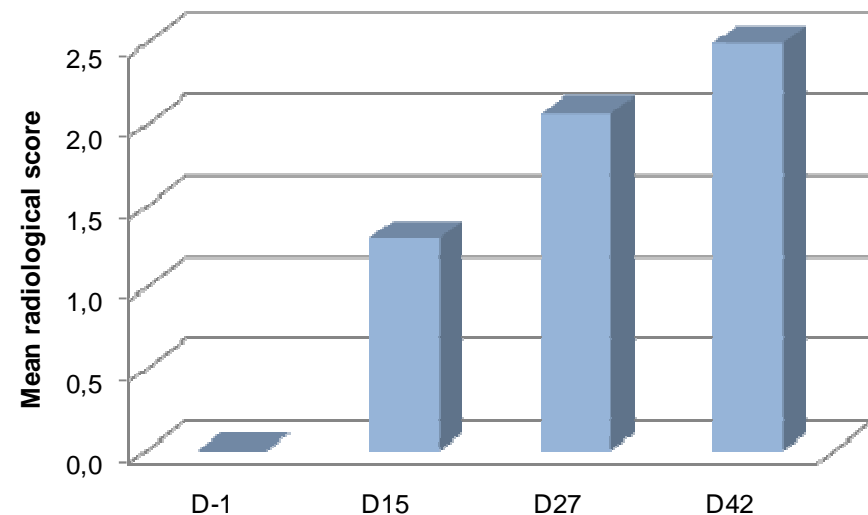


Radiography at D42

- ✓ Scoring of the radiographs:

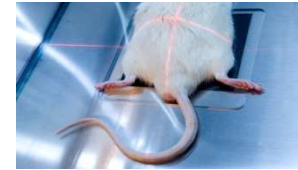
Scoring	Osteoarthritis evolution
0	Physiological articulation
1	Slight articular plucking
2	Moderate articular plucking
3	Severe articular plucking

Rat experimental model of osteoarthritis - ABS



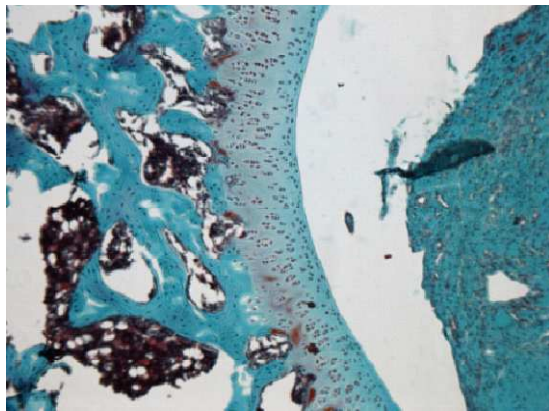
Updated 2011/01/11

Histological analyses

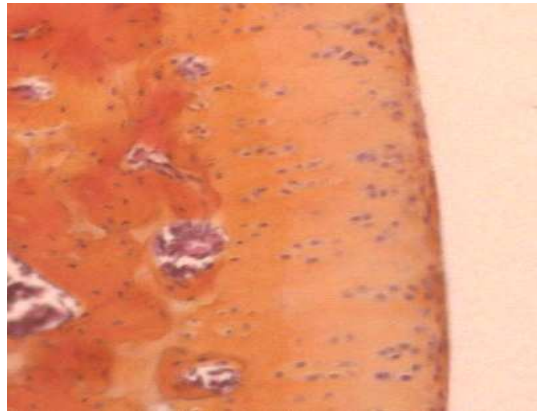


- ✓ Animals euthanized at the end of the study
- ✓ Embedding in paraffin of the right knees and 2 left knees (healthy controls) per group
- ✓ Wide choice of stainings

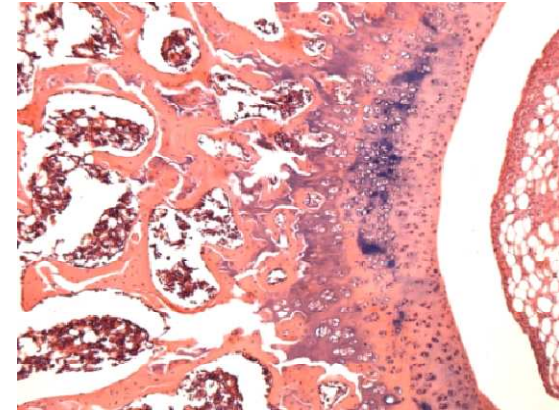
Masson's Trichrome



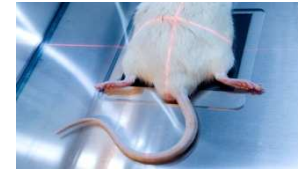
Hematoxylin/Eosin/Safranino



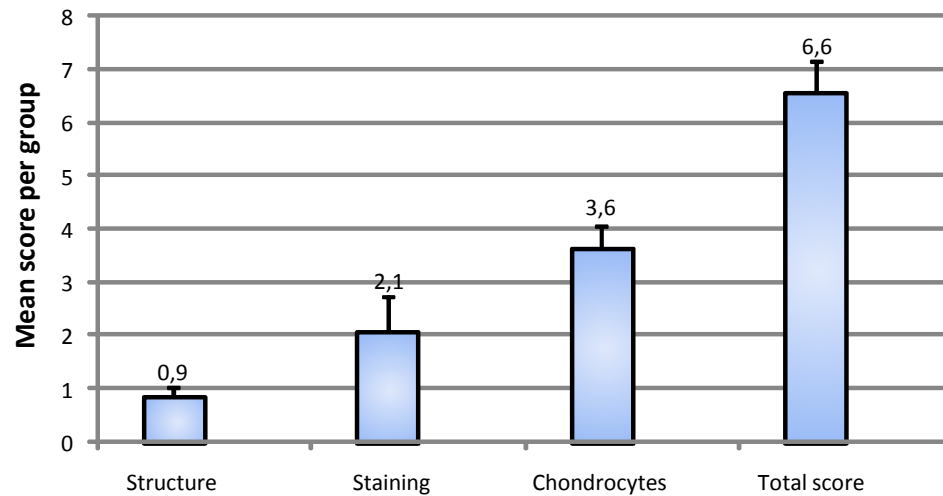
Alcian blue



Histological scores

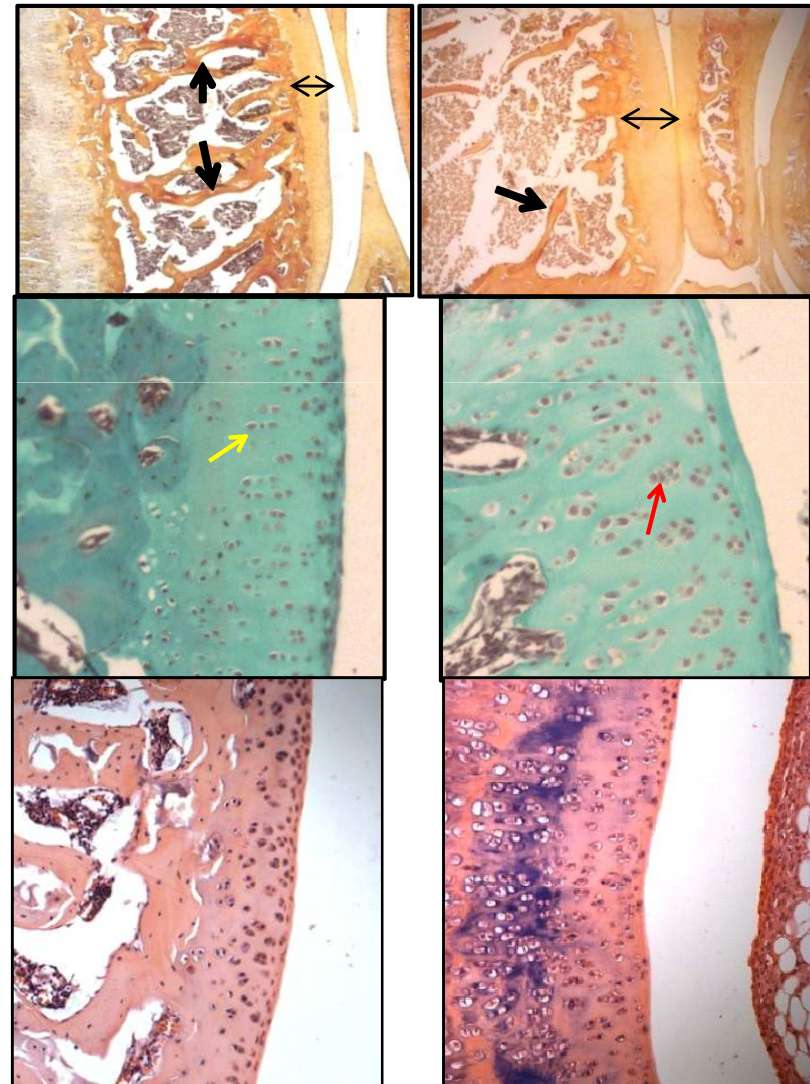


- ✓ Histological score (Mankin's score)
 - Structure
 - Cell abnormalities
 - Degeneration of articular cartilage
 - Loss of articular matrix



Physiologic

Osteoarthritic





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Contact us...

... And we will send you a tailor-made protocol study