

Excluded studies

As reported in Figure 1, several studies (n = 70) were excluded from the list of accepted included studies because they:

- 1) were performed in animals other than guinea pigs, such as rats (n = 7), rabbits (n = 6), mice (n = 5), bovines (n = 2), humans (n = 2), mini-pigs (n = 1), sheep (n = 1), and pigs (n = 1);
- 2) did not treat the pathology of OA, but skeletal muscle injury (n = 3), costal cartilage injury (n = 2), mitochondrial genome sequencing (n = 1), plasma and joint tissue pharmacokinetics (n = 1), arterial hypertension and hyperlipidemia (n = 1), intervertebral disc degeneration (n = 1), hematology (n = 1), hemorrhagic fever (n = 1), muscle afferent neurones disease (n = 1), osteochondral defects (n = 2), ex vivo studies in humans and bovine cartilage (n = 3), finite element (n = 3);
- 3) treated non-spontaneous OA, but induced through systemic iron overload (n = 1), meniscectomy (n = 7), cranial cruciate ligament excision (n = 3), and anterior cruciate ligament transaction (ACLT) (n = 4);
- 4) were in vitro studies on chondrocytes (n = 2), synoviocytes (n = 1), immune cells (n = 1), and meniscal cells (n = 2);
- 5) described equipments for diagnostic purposes, such as a high-resolution small animal ultrasound system with a transducer for image-guided injections (n = 1), and MRI for animal research (n = 2);
- 6) did not treat knee OA, but temporomandibular one (n = 1).