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# In vitro diagnostic method for osteoarthritis

Health / In vitro diagnosis / Osteoarthritis



REFERENCE SYNODIAG [L1699]

**KEYWORDS** 

DIAGNOSIS / IVD / FOLLOW UP / MONIOTORING / OSTEOARTRITIS / OA / JOINT /



## **APPLICATIONS**

- Osteoarthritis diagnosis and followup : human health, animal health
- Preclinical / clinical development : assessment tool for drug candidates targeting osteoarthritis



# TARGET MARKETS

- IVD diagnosis
- Biological analyses laboratories
- Hospital laboratories
- Pharmaceutical industry (human & animal health)

Technology readiness level ...

∴ TRL 4



Priority patent application pending FR1661956

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### **DESCRIPTION**

This invention is a method for osteoarthritis *in vitro* diagnosis and follow-up. It relies on a minimally invasive extraction of synovial fluid into the joint. The morphological analysis of a drop of synovial fluid provides a clear and simple diagnosis of osteoarthritis at the onset of the pathology. An additional spectroscopic analysis allows further assessment of the development stage and amount of inflammation, correlated to current osteoarthritis biomarkers (hyaluronic acid, chondroitin sulfate...). Currently, osteoarthritis diagnosis is late, when the disease is advanced and the first clinical symptoms appear. This test provides a simple and efficient solution to detect and assess early-stage osteoarthritis cases, and follow the disease progression in humans or animals.

### COMPETITIVE ADVANTAGES

- Early-stage osteoarthritis diagnosis, osteoarthritis follow-up
- Integrated test for all osteoarthritis biomarkers
- Minimally invasive sampling
- Ease of use
- No reagent required

### **DEVELOPMENT STATUS**

Proof of concept made on dogs and human synovial liquid samples

### **PARTNERSHIP**

PULSALYS is looking for industrial partners interested in developing or co-developing this device, or a businessman interested in a startup adventure.







