# Discover knee joint distraction treatment with the *Knee*Reviver



## The KneeReviver

- For prolonged pain-relief of end-stage knee-OA
- · Patients <65 year
- Temporarily unloading of the damaged knee joint
- Allows for intrinsic cartilage regeneration

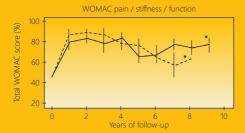
# **Advantages**

- Joint preserving treatment, 30-45 mins procedure
- Postponing a knee prosthesis, expected avoidance of revision surgery
- Other treatment options are still possible when complaints eventually recur

The KneeReviver is developed by ArthroSave, in collaboration with orthopaedic surgeons, researchers and patients. It is the only device with intended use for knee joint distraction.



# Long-term clinical improvement



- Survivors; still functioning without prosthesis
- ---- Failures (mean 6.4 years); scores are still improved at the time of knee replacement

# **Evidence for intrinsic cartilage repair**



pre-treatment





post-treatment





### Indication

- Patient is under 65 years of age.
- Patient has end-stage knee osteoarthritis (Kellgren and Lawrence score 2-4).
- Patient is suffering from predominantly tibiofemoral osteoarthritis.
- The KneeReviver accepts a maximum weight of 120 kg.



# Surgical procedure

- KneeReviver is placed on eight bone pins, drilled into the femur and tibia.
- By placing the KneeReviver, the distractor at the same time functions as your guide. It will easily tell you where to place the next pin.
- Pins are placed extra-articular, which leaves the joint undisturbed
- After a short learning-curve the procedure will approximately take 30-45 minutes.
- After placement directly 2 mm of distraction is applied. The next 3 mm is gradually given in the next days.



### Distraction

- The KneeReviver is unloading the knee joint during the treatment of 6 weeks.
- After the treatment the KneeReviver is removed in daycare and the knee will be manipulated under anesthesia (MUA).



### **During treatment**

 Patient is advised to use anti-coagulants during treatment, until one week after removal.



### Rehabilitation

- After removal the patient can fully load the leg and start with the rehabilitation phase It can take a couple of months before results are noticable.
- After knee joint distraction, the preservation of the knee joint ensures that all forms of treatment are still possible, if needed.



Jansen MP, et al. Knee joint distraction compared with high tibial osteotomy and total knee arthroplasty: two-year clinical, radiographic, and biochemical maker outcomes of two randomized controlled trials. Cartilage. 2019 Feb 13:1947603519828432. doi: 10.1177/1947603519828432.

Wiegant K, et al. (2015) Total Knee Prosthesis after Knee Joint Distraction Treatment. J Surg Surgical Res 1(3): 066-071. DOI: 10.17352/2454-2968.000016