

# CaReS®-1S

# Product Information





### **Cartilage Regeneration**

• The CaReS®-1S implant is THE cartilage regeneration technology which taps the advantages of an Autologous Chondrocyte Implantation with only one intervention.



### **Properties of CaReS®-1S**

- Effective reduction of pain and improvement of mobility;
   improvement of quality of the life of your patients
- Proven migration of cells into the CaReS®-1S matrix and formation for hyaline-like cartilage
- One-time gentle intervention
- Easy to apply and fix; simple and fast OR-procedure
- CE Mark
- CaReS®-1S is a round implant to treat focal cartilage defects up to 8cm2
- The implant is a sterile ready-to-use primary cellfree implant based on a dense patented matrix of Collagen type 1
- CaReS®-1S fills the defect completely
- CaReS<sup>®</sup>-1S is an "off-the-shelf" product, and can be stored by any temperatures between 2° C − 25° C.





#### **INDICATIONS**



- Focal, full-layer cartilage defects (knee and ankle) with preserved cartilage shoulder
- ICRS-classification 3 and 4
- Defects without and with involvement of the subchondral bone lamella (at osteochondral defects the bone has to be rebuild to form a stable foundation)
- Defect size: up to 8 cm<sup>2</sup>
- Age: 18 60 (taking into account the biological age of the joint)
- BMI < 35
- Osteochondrosis dissecans



#### **FIRST RESULTS**

CaReS®-1S

- CaReS®-1S remains in the defect and is stable
- CaReS®-1S is colonized by precursor cells migration from the surrounding tissue (6-12 weeks)
- These cells differentiate into chondrocytes, express Collagen Type II and transform CaReS®-1S into a stable hyaline-like tissue (52 weeks)
- CaReS®-1S integrates very well into the defect and the surrounding tissue.

  Its regenerative potential can be compared to that of cell-colonized transplants

# First results of a clinical study on 27 patients with focal femoral condyle and retropatellar joint defects indicate:

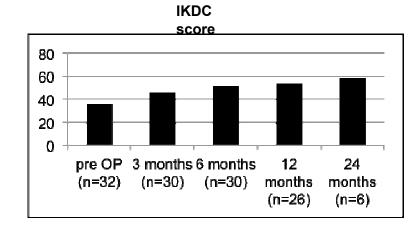
- Evident pain relief
- Successful defect filling
- Formation of hyaline-like cartilage
- Very good compatability
- Clear tendency towards functional improvement

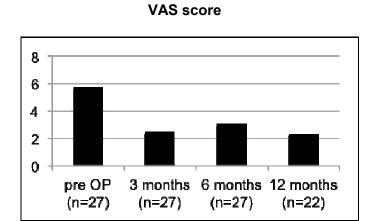




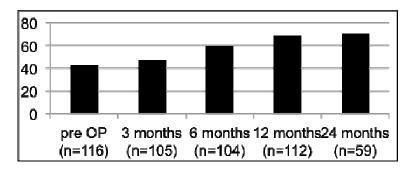
First results of a clinical study on 27 patients with focal femoral condyle and retropatellar joint defects (IKDC and VAS score compared to CaReS® the basic technology of the CaReS®-1S hydrogel)

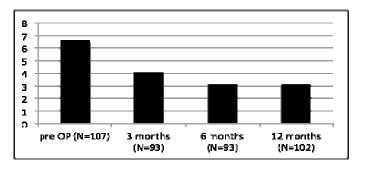
CaReS®-1S Cell free





CaReS®
MACI
(Basic technology;
hydrogel with
breeded cells)





**Data CaReS**®: A Prospective Multicenter Studyon the Outcome of Type I Collagen Hydrogel–Based Autologous Chondrocyte Implantation (CaReS) for the Repair of Articular Cartilage Defects in the Knee Schneider et al, Am J Sports Med 2011 39: 2558 originally published online October 7, 2011





## CaReS®-1S - PRODUCT INFORMATION

#### Rehabilitation



Femur condyles / talus role

(Surgery/Impl

antation)

At least 2 x daily for 1h continuous passive motion (CPM)

- 2<sup>nd</sup> postoperative day: Mobilisation after removal of the drainage
- 20 kg partial weight bearing of the operated extremity for 6 weeks, free mobility

After achievement of full weight bearing cycling and swimming allowed, carful musclestrength training

From the 7<sup>th</sup> postoperative week load progression 30kg/2 weeks

Jump-, run- and contact sports allowed after 1 year

Time

Day 2 after surgery Week 6 after surgery

Week 7 after surgery Week 12 after surgery

Week 52 after surgery



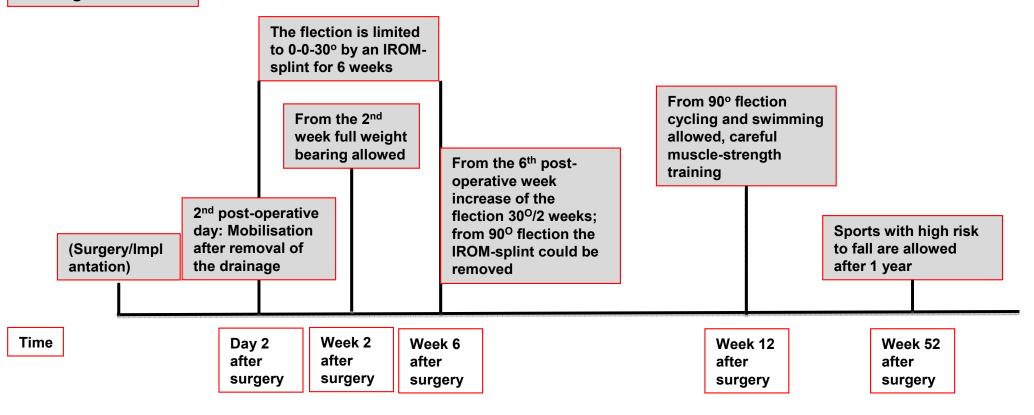


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#### Rehabilitation



# Patella and glide bearing







www.arthro-kinetics.com