

RECARTA

PATIENT GUIDE

Understanding Cartilage Damage & RECARTA Treatment

A comprehensive guide to cartilage cell therapy,
the RECARTA treatment process, recovery expectations,
and eligibility criteria.

UNDERSTANDING THE PROBLEM

Cartilage Damage

Articular cartilage is the smooth, protective tissue covering the ends of bones in your joints. It allows your joints to move freely and absorbs the impact of movement. Unlike most tissues in your body, cartilage has no blood supply and very limited ability to repair itself.

When cartilage is damaged — whether from injury, sports, or wear — the defect tends to worsen over time, leading to pain, swelling, and reduced mobility. Without proper treatment, this can progress to osteoarthritis.

Common symptoms of cartilage damage

- Persistent knee pain, especially during or after activity
- Swelling and stiffness in the joint
- Catching, locking, or grinding sensation
- Reduced range of motion
- Pain when climbing stairs or walking on uneven ground
- Joint instability or giving way

Cartilage defects do not heal on their own. Early treatment can prevent further joint deterioration and help you return to an active, pain-free life.

Why cartilage cannot repair itself

Cartilage is avascular — it has no blood vessels. This means the body's natural healing mechanisms, which rely on blood supply to deliver repair cells and nutrients, cannot reach damaged cartilage. Once a defect forms, it typically remains or worsens without intervention.

Treatment options comparison

	Microfracture	Osteochondral Grafts	Chondrocyte Therapy (RECARTA)
Tissue Type	Fibrocartilage (scar-like)	Donor cartilage	Hyaline-like (natural)
Defect Size	< 2 cm²	< 2 cm²	≥ 1 cm²
Durability	Declines after 2-3 yrs	Variable	15+ year follow-up
Procedures	Single	Single	Two-stage
Best For	Small defects	Small, deep defects	Larger defects, long-term

THE TREATMENT

The RECARTA Process

RECARTA is an autologous chondrocyte therapy (ACT). It uses your own cartilage cells, cultivated and implanted to regenerate healthy tissue. The treatment is a well-established, four-step procedure performed by qualified orthopedic surgeons.

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Cartilage Biopsy

~30 minutes | Outpatient

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Your orthopedic surgeon performs a minimally invasive arthroscopy to collect a small sample of healthy cartilage tissue from a non-weight-bearing area of your knee joint. The procedure is typically performed under local or regional anesthesia. Most patients can return home the same or the next day. The cartilage sample is then carefully transported to our manufacturing facility under controlled conditions.

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Cell Cultivation

4 weeks | Licensed laboratory

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Your cartilage cells are isolated and cultivated in our state-of-the-art, licensed laboratory. Over approximately 4 weeks, the chondrocytes are carefully multiplied under strictly controlled conditions. Once enough cells have been grown, they are formulated into your personalized RECARTA implant. Every step is subject to rigorous quality controls and comprehensive testing before release.

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Implantation

Surgical procedure | 1-2 day hospital stay

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Your orthopedic surgeon implants the RECARTA implant into the cartilage defect in your knee. The surgeon prepares the defect site, carefully fits the implant to match the exact size and shape of the defect, and secures it in place. Over the following weeks and months, the implanted chondrocytes integrate with surrounding tissue and produce new hyaline-like cartilage.

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Rehabilitation

8-12 weeks guided | 3-12 months total

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Follow a structured rehabilitation plan with your orthopedic surgeon and physiotherapist to optimize recovery. Every patient is evaluated and treated individually. Most patients return to light activities 8–10 weeks and gradually to sport after that.

Recovery and Results

Rehabilitation is a critical part of the RECARTA treatment. A structured program helps ensure optimal cartilage regeneration and a successful return to activity. Every patient is evaluated and treated individually.

Recovery timeline

Week 1-2	Early Recovery Protected weight-bearing with crutches. Gentle range-of-motion exercises begin under physiotherapist guidance.
Week 3-6	Progressive Mobilization Gradual increase in weight-bearing. Physiotherapy with focus on restoring range of motion. Stationary cycling may begin.
Month 2-3	Strengthening Phase Progressive strengthening exercises. Full weight-bearing typically achieved. Swimming and cycling encouraged.
Month 4-6	Functional Recovery Sport-specific exercises begin. Progressive return to higher-impact activities. Regular follow-up with your surgeon.
Month 6-12	Return to Activity Gradual return to full activity and sports. Cartilage continues to mature and strengthen.

Clinical evidence

The efficacy and safety of membrane-associated autologous chondrocyte therapy is supported by extensive peer-reviewed clinical research spanning over 15 years.

92%	85%	15yr	50+
Patient satisfaction at 5-year follow-up	Return to sport/activity	Long-term follow-up data	Peer-reviewed publications

Eligibility and FAQ

Who is a candidate for RECARTA?

RECARTA is typically suitable for patients who meet the following criteria:

- Aged 18–60 years
- Focal cartilage defects (chondromalacia) of 1 cm² or larger in the knee
- Have not responded adequately to conservative treatment
- Isolated defects (not widespread osteoarthritis)
- Stable knee ligaments (or willing to undergo concurrent stabilization)
- Motivated to follow the rehabilitation program

Not sure if you are eligible? Take our free, no-obligation eligibility assessment at www.keli.eu or call +370 622 58 999 for a free consultation.

Frequently asked questions

Q: What is RECARTA?

RECARTA is a membrane-associated autologous chondrocyte therapy. It uses your own cartilage cells (chondrocytes), which are harvested, cultivated in a certified manufacturing facility, and then implanted back into your knee to regenerate damaged cartilage. It is a patient-specific, biological treatment manufactured by KELI Therapeutics.

Q: How long does recovery take?

Structured rehabilitation depends on the patient's activity level needs and is typically over 3–12 months. Most patients return to light activities at 8–10 weeks and gradually to sport after that. Every patient is evaluated and treated individually.

Q: Is RECARTA covered by insurance?

Coverage varies by country and provider. Chondrocyte therapy is recognized as a standard treatment in many European countries and the US. Our patient coordinators can help you understand your options and assist with documentation.

Q: How effective is the treatment?

Clinical studies demonstrate 92% patient satisfaction at 5-year follow-up, 85% return to sport/activity, and 87% good-to-excellent cartilage fill on MRI. Long-term studies show sustained improvement at 10–15 years.

Q: How long do results last?

Published clinical data shows durable results at 15-year follow-up. The regenerated cartilage continues to mature and integrate over the first 2–5 years, and studies show that clinical improvements are maintained long-term. RECARTA is designed to be a lasting biological solution.

Q: What are the risks?

As with any surgical procedure, there are risks including infection, bleeding, and anesthesia-related complications. Specific to RECARTA, rare complications include graft hypertrophy or incomplete integration. The overall complication rate is low, and your surgeon will discuss all risks before treatment.

Ready to take the next step?

Whether you are exploring options or ready to begin, our team is here to help. Start with a free eligibility assessment or speak directly with a patient coordinator.

Email: info@keli.eu

Phone: +370 622 58 999

Website: www.keli.eu

This guide is for informational purposes only and does not constitute medical advice. Always consult with a qualified healthcare professional before making treatment decisions. Individual results may vary. RECARTA is manufactured by KELI Therapeutics, Kaunas, Lithuania.