

PATIENT INFORMATION

Understanding Your Options for Knee Cartilage Damage

A general orientation to the treatments commonly discussed for cartilage defects and knee osteoarthritis, and how the choice between them is made.

Prepared by St. Luke Hospital, Joint Center · September 2026. Descriptions of CARTISTEM® follow the Korean product information.

Purpose: To help you follow the conversation with your orthopedic specialist — not to rank treatments.

Options commonly discussed for knee cartilage damage

Option	What it does	Who it may be considered for	What it does not do
Exercise therapy and rehabilitation	Strengthens the muscles supporting the knee and improves movement patterns.	Most patients, at every stage. Often the first step and a continuing part of any other treatment.	It does not repair a cartilage defect.
Weight management and activity modification	Reduces load on the joint.	Patients whose symptoms are aggravated by load or specific activities.	It does not repair a cartilage defect.
Medication and corticosteroid injection	Reduces inflammation and pain for a period of time.	Patients with symptomatic flare-ups, or those managing pain while other treatment is planned.	It is directed at symptoms rather than at the cartilage surface. Repeated use is discussed individually with your specialist.
Hyaluronic acid injection	Aims to improve joint lubrication and reduce pain.	Selected patients with mild to moderate osteoarthritis.	Reported benefit varies between patients and between published studies.
PRP (platelet-rich plasma)	Uses a concentrate prepared from the patient's own blood, injected into the joint.	Selected patients with mild to moderate osteoarthritis or persistent symptoms.	Evidence is still developing, and preparation methods differ between clinics, which makes results harder to compare.
BMAC (bone marrow aspirate concentrate)	Uses a concentrate from the patient's own bone marrow, injected into the joint. A non-surgical procedure.	Selected patients with KL grade 2-3 osteoarthritis, aiming at inflammation, pain and function.	It is not a cartilage transplantation procedure.

CARTISTEM® (allogeneic UCB- MSC)	A cell-based product applied surgically to the cartilage defect during arthroscopy, at a dose based on defect size.	Selected patients meeting the Korean approved indication, including an ICRS Grade IV defect, after full orthopedic assessment.	It does not guarantee cartilage restoration, pain relief, avoidance of joint replacement, or a specific recovery timeline.
Osteotomy (realignment surgery)	Changes the alignment of the leg to shift load away from the damaged compartment.	Patients whose symptoms are driven mainly by alignment. Sometimes combined with a cartilage procedure.	It requires bone healing time and is not suitable for every alignment pattern.
Total knee arthroplasty (TKA)	Replaces the joint surfaces with an implant.	Patients with advanced osteoarthritis and severe symptoms when joint-preserving options are no longer appropriate.	It is not reversible, and implants have a finite lifespan, which is why timing is discussed individually.

How the choice is made

- **No single option is right for every knee.** The appropriate choice depends on the extent and location of the cartilage defect, osteoarthritis severity, knee alignment, meniscus and ligament condition, symptoms, imaging, activity needs and general health.
 - **Options are often combined or sequenced.** Rehabilitation accompanies almost every option, and a cartilage procedure is sometimes combined with realignment surgery.
 - **All of the options above are available at St. Luke Hospital.** Non-surgical care, injection-based treatment, BMAC, arthroscopic and cartilage procedures, osteotomy and joint replacement are provided within one Joint Center, so the discussion can focus on what suits your knee rather than on what the hospital is able to offer.
- **Please note:** this table is a general orientation, not a ranking and not a recommendation. It is not intended as a comparison of the quality of treatments or providers. Your orthopedic specialist will explain the expected benefits, limitations, risks, alternatives and rehabilitation for your individual situation before you decide.

Sources

CARTISTEM® Korean product information — MFDS approval, January 2012

St. Luke Hospital — CARTISTEM® information page

Regulatory notice. CARTISTEM® is approved in the Republic of Korea (MFDS, January 2012). It is **not approved for commercial use in the United States or in Japan**, where it remains under clinical investigation. Registration of a clinical trial does not constitute approval or endorsement of a treatment by any regulatory authority, and progress in clinical development does not indicate that approval will be granted. **Medical information notice.** This document provides general information and does not replace an in-person medical consultation, diagnosis, or treatment recommendation. The suitability of any option described here depends on individual assessment by a treating orthopedic specialist. Outcomes vary between patients.