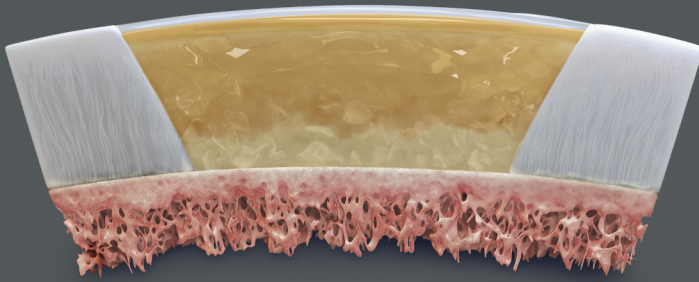


# AutoCart™ Technique

Single-Stage, Arthroscopic Cartilage Restoration Using the Patient's Own Cells



## Microfracture alone is not a long-term answer.

Only **58%** return to sport at 2 years postprocedure.<sup>1</sup> **20.9%** reoperation rate with microfracture at 2 years.<sup>2</sup>

Augmentation with BioCartilage® extracellular matrix (ECM) in the AutoCart technique can:

- Improve functional outcomes<sup>3</sup>
- Improve reparative tissue and result in low reoperation rate<sup>2</sup>



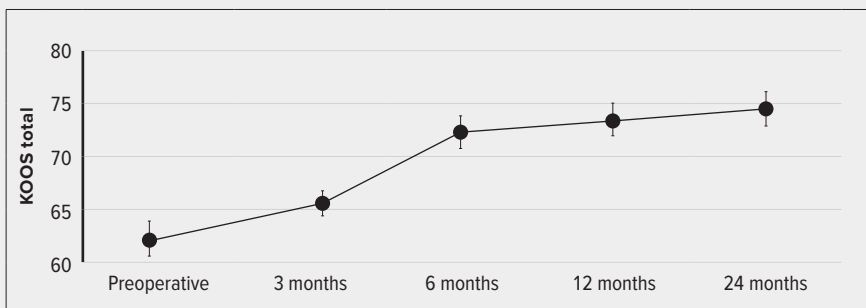
Particulate cartilage chips provide increased surface area, better outgrowth, and better ECM production.<sup>4</sup>



Collection of central or peripheral cartilage with the GraftNet™ device can lead to increased cartilage quality and viability.<sup>1</sup>

The AutoCart graft preserves the pericellular matrix (PCM), containing the proteins to drive chondrogenesis.<sup>5</sup>

At **2 years**, the AutoCart procedure can lead to significant improvements in patient-reported outcomes.<sup>6</sup>



**62.4 at baseline | 74.4 at 2 years post-op**

At **5-year follow-up**, patients who underwent the AutoCart procedure showed **significant improvement in pain and function**

and a **3.5% revision rate** in the knee.<sup>7</sup>

**References**

1. Krych AJ, Pareek A, King AH, Johnson NR, Stuart MJ, Williams RJ 3rd. Return to sport after the surgical management of articular cartilage lesions in the knee: a meta-analysis. *Knee Surg Sports Traumatol Arthrosc.* 2017;25(10):3186-3196. doi:10.1007/s00167-016-4262-3 2. Drakos MC, Eble SK, Cabe TN, et al. Comparison of functional and radiographic outcomes of talar osteochondral lesions repaired with micronized allogenic cartilage extracellular matrix and bone marrow aspirate concentrate vs microfracture. *Foot Ankle Int.* 2021;42(7):841-850. doi:10.1177/1071100720983266 3. Cole BJ, Haunschild ED, Carter T, et al. Clinically significant outcomes following the treatment of focal cartilage defects of the knee with microfracture augmentation using cartilage allograft extracellular matrix: a multicenter prospective study. *Arthroscopy.* 2021;37(5):1512-1521. doi:10.1016/j.arthro.2021.01.043 4. Bonasia DE, Marmotti A, Mattia S, et al. The degree of chondral fragmentation affects extracellular matrix production in cartilage autograft implantation: an in vitro study. *Arthroscopy.* 2015;31(12):2335-2341. doi:10.1016/j.arthro.2015.06.025 5. Ossendorff R, Walter SG, Schildberg FA, et al. Biologic principles of minced cartilage implantation: a narrative review. *Arch Orthop Trauma Surg.* 2023;143(6):3259-3269. doi:10.1007/s00402-022-04692-y 6. Schneider S, Ossendorff R, Walter SG, et al. Arthroscopic autologous minced cartilage implantation of cartilage defects in the knee: a 2-year follow-up of 62 patients. *Orthop J Sports Med.* 2024;12(12):23259671241297970. doi:10.1177/23259671241297970 7. Runer A, Ossendorff R, Öttl F, et al. Autologous minced cartilage repair for chondral and osteochondral lesions of the knee joint demonstrates good postoperative outcomes and low reoperation rates at minimum five-year follow-up. *Knee Surg Sports Traumatol Arthrosc.* 2023;31(11):4977-4987. doi:10.1007/s00167-023-07546-1

