

Cleansed, processed and preserved
to maintain chondrocyte viability

Fresh-stored Osteochondral Allograft



For patients with articular cartilage damage in the knee, iOrtho's Fresh-stored Osteochondral Allograft enables surgeons to resurface large cartilage defects ($>2\text{cm}^2$) with mature hyaline cartilage and healthy subchondral bone in a single procedure.

Devoted to quality and safety:

- iOrtho, through RTI Surgical, ensures safe, high-quality tissue, while maintaining chondrocyte viability, through all phases of recovery, screening, testing and processing in accordance with AATB standards.

RTI achieves this via:

- **Stringent donor screening and testing**
- **Highly skilled and trained processors**
- **Validated processing techniques**
- **Qualified shipping measures**
- **Commitment to research and innovation**

- After processing, the grafts are stored refrigerated in a nutrient media to preserve chondrocyte viability.

- iOrtho's fresh-stored grafts have a validated shelf life of 45 days.*

- All iOrtho fresh-stored grafts are aseptically processed in RTI's certified ISO Class 5 clean room, tested in a CLIA certified laboratory and soaked in a proprietary antibiotic cocktail.

- The suitability of fresh-stored allografts is determined via multiple microbial cultures and destructive tests.

Osteochondral Allograft Matching Service:

- iOrtho's fresh-stored osteochondral allografts are patient matched using MRIs/measured x-rays or relevant patient data. This allows for the highest consistency, efficiency and quality assurance.
- A member of our customer service team will oversee the process, from initial order through to the implantation date; providing you with an unparalleled level of service.

*45 day shelf life begins from time of recovery. Your sales representative can inform you of the grafts date of expiration.

Allograft Plug Preparation Technique for Femoral Condyle Lesions



Post-identification defect, drilled Steinmann pin and advanced flat blade drill into condyle.



Secured allograft in vise, in same orientation as patient's exposed condyle.



Oriented plug, advanced into recipient using press fit.

The images below compare the cell viability of an osteochondral graft with that of a patient's own knee cartilage.

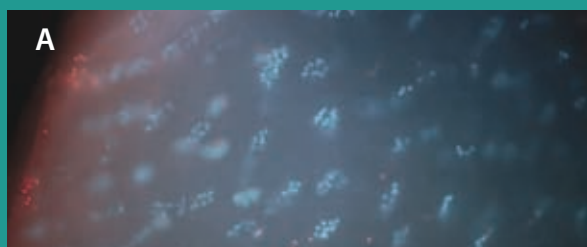


Figure 2.

A, live-dead staining of osteoarticular graft biopsy specimen.

B, live-dead staining of native biopsy specimen (same patient [control]).

Source: Clinical, Histologic, and Radiographic Outcomes of Distal Femoral Resurfacing With Hypothermically Stored Osteoarticular Allografts Philip A. Davidson, Dennis W. Rivenburgh, Patti E. Dawson and Roman Rozin Am. J. Sports Med. 2007; 35; 1082

Attributes & Benefits

- Fresh-stored osteochondral allograft transplantation provides the ability to resurface large cartilage defects with mature hyaline cartilage and repair subchondral bone in a single procedure. (McCulloch et al., 2007)
- Fresh-stored osteochondral allografts are more desirable than frozen allografts due to hyaline cartilage exhibiting diminished cell viability and matrix degeneration after freezing. (Bugbee, 2000)
- Cartilage resurfacing allows for repair of damaged subchondral bone and provides mature hyaline cartilage, which can increase load-bearing capability compared to fibrocartilage. (Pearsall et al., 2004)
- Over time, the graft will incorporate into the patient's knee; resulting in a smooth, functional cartilage surface in the joint

Code:

2682
2683
2684
2685

Description:

Left Lateral Condyle
Left Medial Condyle
Right Lateral Condyle
Right Lateral Condyle

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Hospital Innovations also distribute the following osteochondral allografts: talus, patella, humeral heads, trochlea and distal tibia.

iOrtho



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