

Allograft OATS[®] System for Articular Cartilage Restoration

Surgical Technique

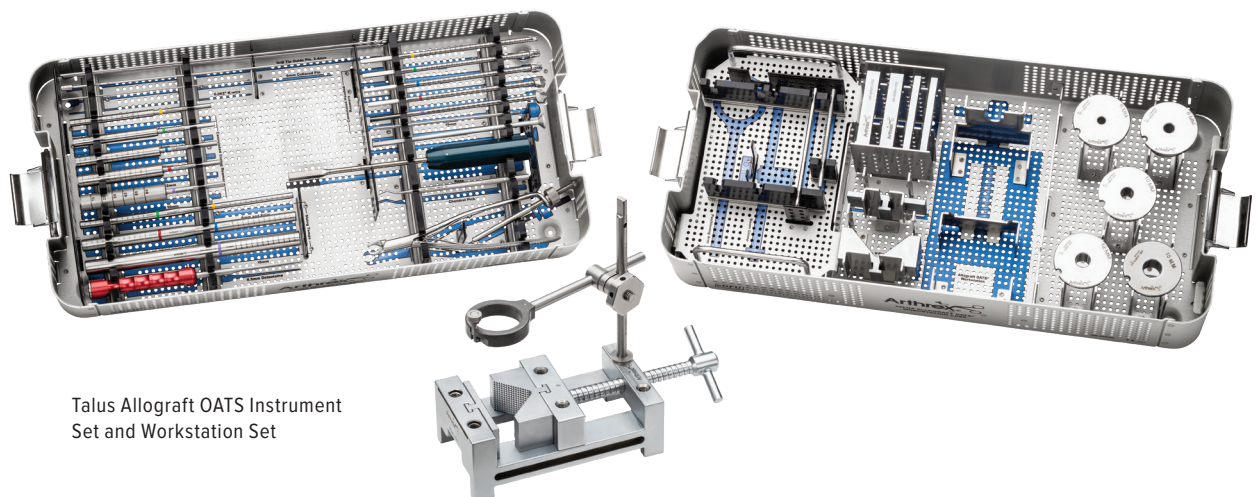
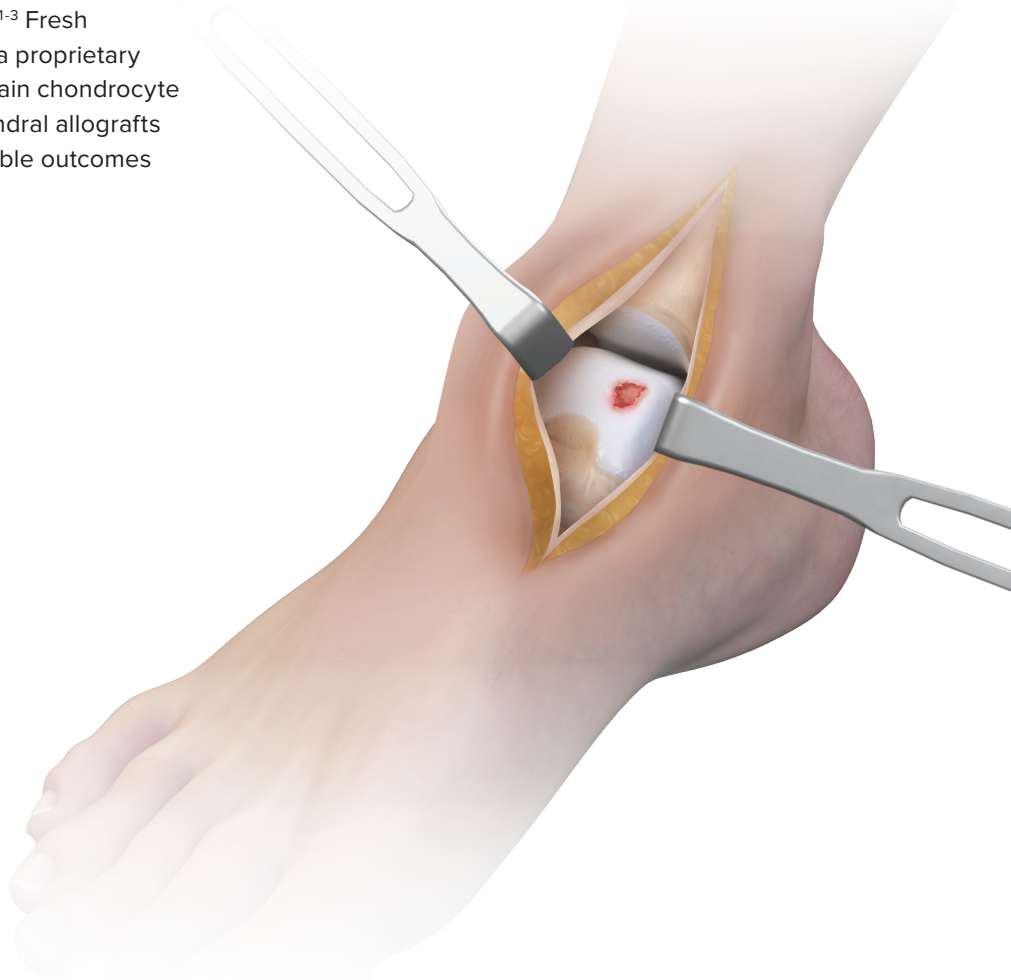


Arthrex[®] 

Allograft OATS® System for Cartilage Resurfacing

Surgical Technique of the Foot and Ankle

There are few treatment options for patients with large, symptomatic lesions of osteoarticular surfaces. Using fresh osteochondral allografts for osteoarticular resurfacing allows a surgeon to match the contour and cartilage morphology of the recipient site without recovering an autograft from the knee.¹⁻³ Fresh osteochondral allografts are stored in a proprietary storage nutrient media at 4° C to maintain chondrocyte viability. The results of fresh osteochondral allografts are well documented and provide reliable outcomes when restoring articular cartilage.

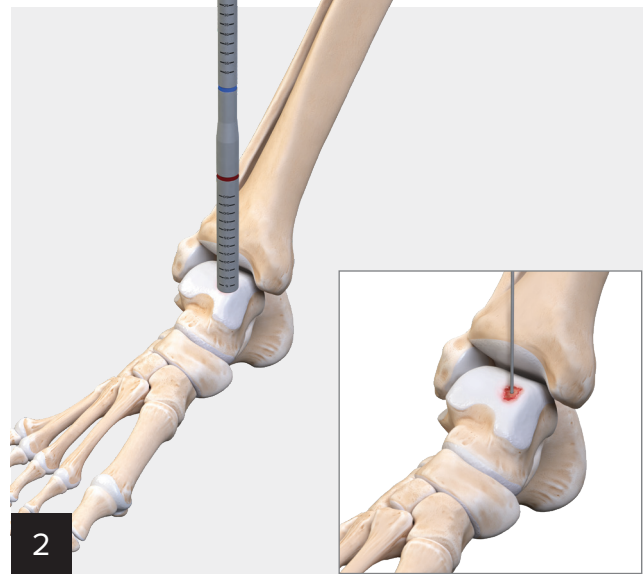


Talus Allograft OATS Instrument Set and Workstation Set

Surgical Technique



Following standard preoperative examination and diagnostic studies to confirm the size and extent of the lesion, perform a standard arthrotomy to expose the defect. Use the appropriate cannulated allograft OATS® sizer to estimate and approximate coverage of the lesion. If necessary, use a malleolar osteotomy to access the joint and cartilage defect.



After confirming the allograft is appropriately contoured and size-matched to the defect, return to the recipient site and place the sizer over the defect, staying perpendicular to the talar surface. Advance a 2.4 mm drill-tip guide pin through the sizer into bone. Place a reference mark in a superior 12 o'clock position.

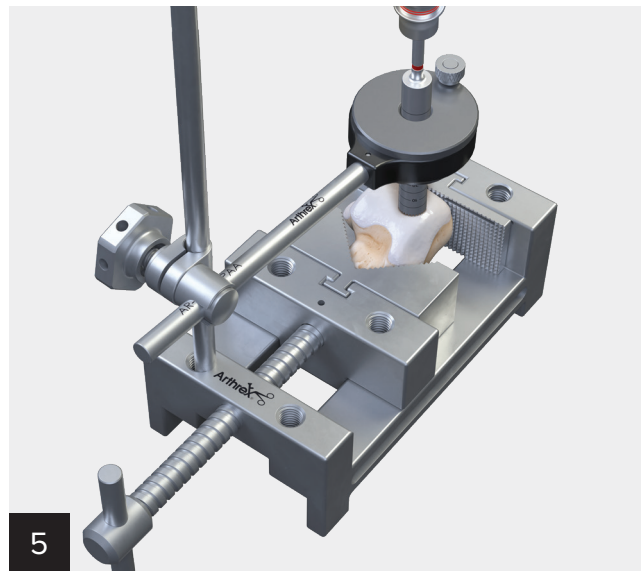


Select the appropriately sized cannulated recipient site reamer and assemble over the drill-tip guide pin. Drill the counterbore into the defect and subchondral bone to the desired depth, typically 8 mm to 12 mm. Confirm bleeding subchondral surfaces.



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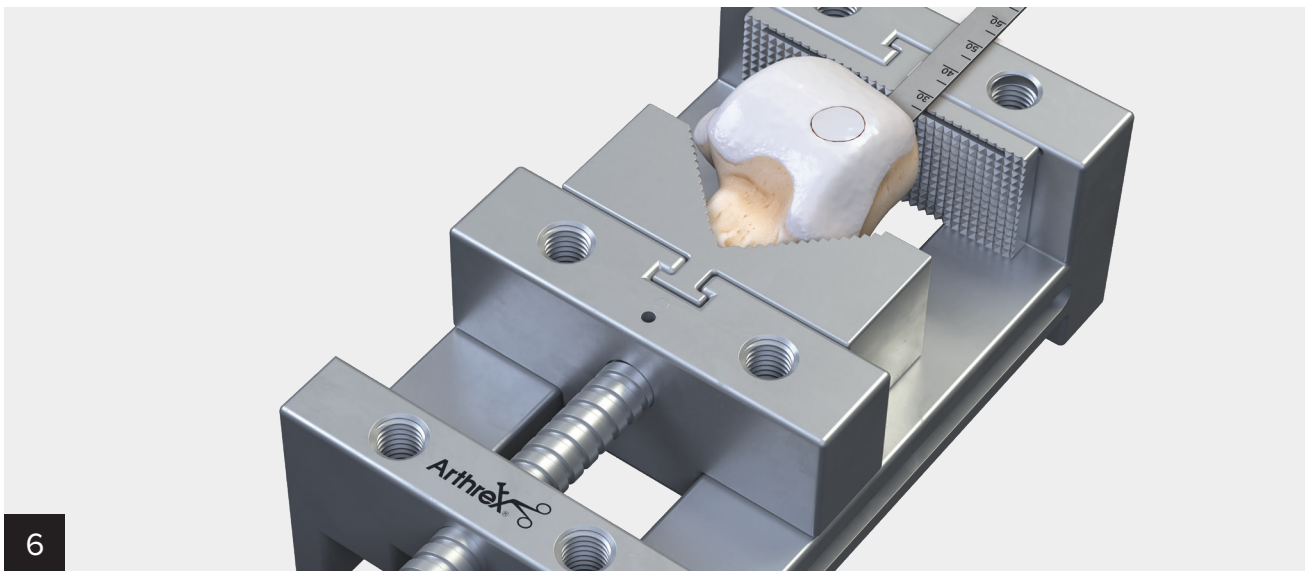
Take depth measurements of the created socket from four quadrants (12, 3, 6, and 9 o'clock) and record them for use when creating the allograft core.



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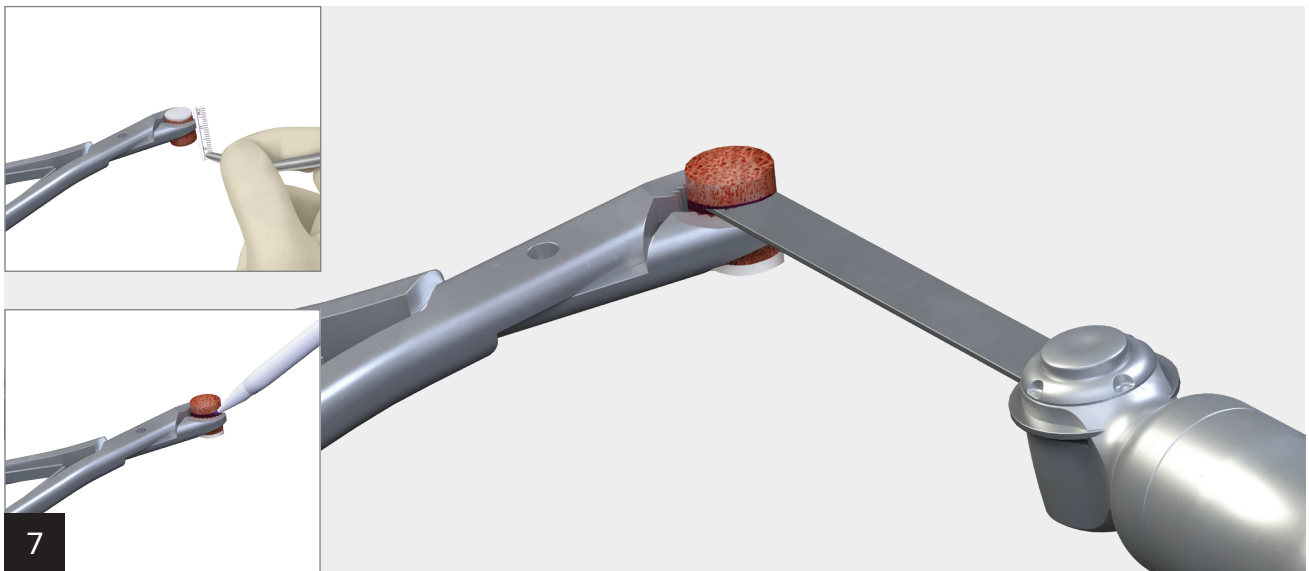
Secure the donor allograft in the allograft OATS® workstation. Place the appropriately sized allograft OATS workstation bushing into the articulating arm housing and secure. Move the articulating arm over the graft and set to the angle necessary to match the recipient site contour, then use the OATS sizer to confirm perpendicularity to the graft. Securely fasten the housing using the hexagon bolt and cheater bar, then advance the appropriate donor harvester with collared guide pin to a depth of at least 15 mm.

Note: Use the available workstation spacers to elevate or stabilize the graft as needed.

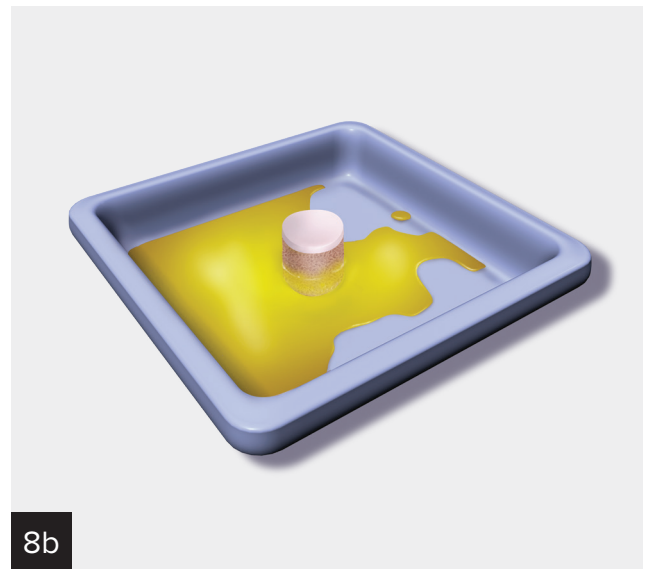


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Advance a sagittal saw perpendicularly through the allograft talus at the approximate depth of the reaming and continue until the core releases. Alternatively, ream through the entirety of the allograft and use the collared guide pin to gently extract the graft.



Mark the depths recorded from the recipient socket on the four quadrants of the graft, then draw a circumferential mark on the bone. Secure the graft in the allograft OATS[®] holding forceps and use a saw to slowly trim it to achieve the appropriate length of bone and ensure a press-fit in the recipient socket. The allograft should be positioned with the articular surface inferior to the cut.



Next, bulletize the bony aspect of the allograft and pulse lavage with sterile saline. The allograft bone may be soaked in Arthrex ACP[®] autologous conditioned plasma or concentrated platelet-rich plasma (cPRP) from bone marrow aspirate using the Angel[®] system.



Optionally, a thin layer of demineralized bone matrix (DBM), such as AlloSync® DBM gel, may be applied to the recipient socket to achieve slight adjustments in graft fit as needed.



Match the graft reference mark with the recipient reference mark for orientation. Advance the graft with firm pressure into the socket. A tamp may be used as needed to achieve complete insertion.

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Advance the graft until flush with the surrounding cartilage. The allograft OATS® graft retriever may be used to facilitate extraction of the graft in the event minor adjustments are needed.



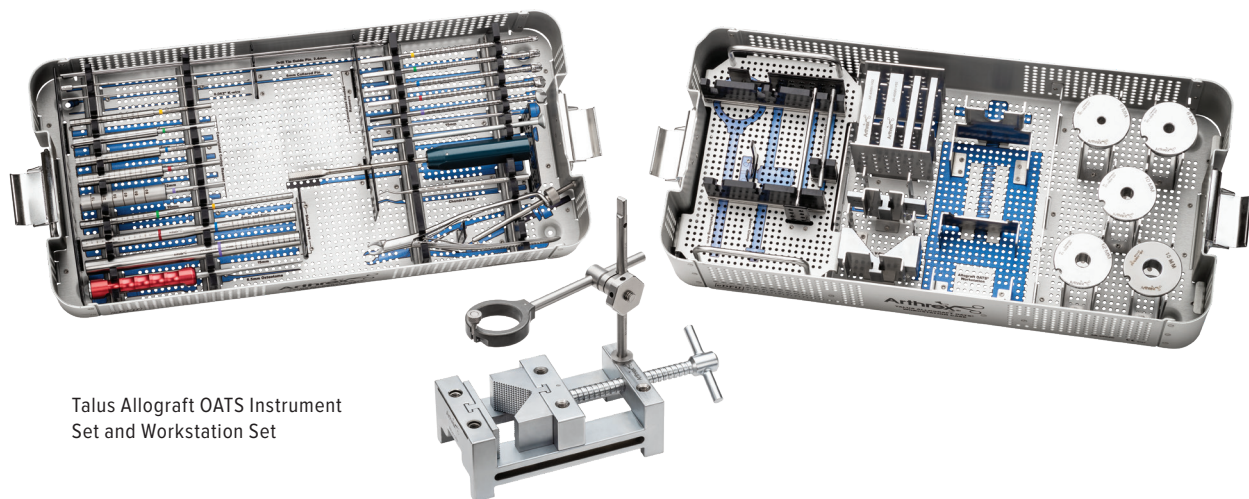
Ordering Information

Talus Allograft OATS® Workstation

Product Description	Item Number
Talus Allograft OATS Workstation and Instrumentation Set, 6 mm, 8 mm, 10 mm, 12 mm, 15 mm	RAR-8901S

Accessories

Product Description	Item Number
Arthrex ACP® Double-Syringe System	ABS-10010S
AlloSync™ DBM Gel, 1 cc	ABS-2013-01
AlloSync DBM Gel, 5 cc	ABS-2013-05



Talus Allograft OATS Instrument Set and Workstation Set

References

1. Gaul F, Tíríco LEP, McCauley JC, Pulido PA, Bugbee WD. Osteochondral allograft transplantation for osteochondral lesions of the talus: midterm follow-up. *Foot Ankle Int.* 2019;40(2):202-209. doi:10.1177/1071100718805064
2. VanTijenderen RJ, Dunn JC, Kusnezov N, Orr JD. Osteochondral allograft transfer for treatment of osteochondral lesions of the talus: a systematic review. *Arthroscopy.* 2017;33(1):217-222. doi:10.1016/j.arthro.2016.06.011
3. Hollawell S, Moen R, Coleman M, Carson M. Osteochondral fresh allograft transfer to address osteochondral defect of the first metatarsal head in early hallux limitus. *J Foot Ankle Surg.* 2021;60(1):157-162. doi:10.1053/j.jfas.2020.04.003



This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience, and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level and/or outcomes.

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