

BunionBrace™ Medial Capsule Repair

Surgical Technique



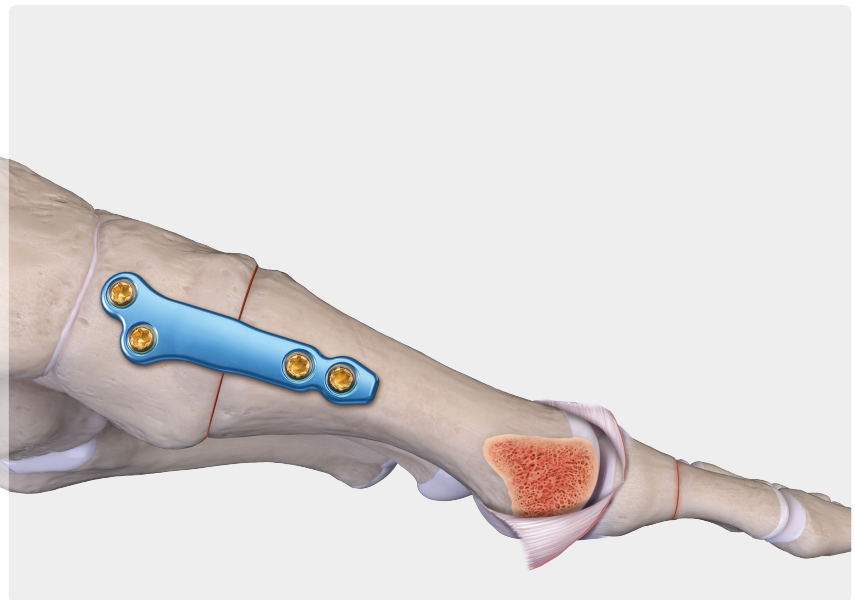
BunionBrace[™] Medial Capsule Repair

Introduction

Arthrex is pleased to add the *BunionBrace* medial capsule repair system to our extensive product offering for metatarsophalangeal (MTP) joint instability. The *BunionBrace* surgical technique can be used to augment and reinforce a direct repair to the medial capsule during hallux valgus correction, with the goal of reducing the chances of recurrence of a valgus deformity at the MTP joint. Weakness in the joint capsule can be a mechanism for recurrence of the deformity. Augmenting the capsular repair using the *BunionBrace* system aims to increase the strength of the primary repair.¹



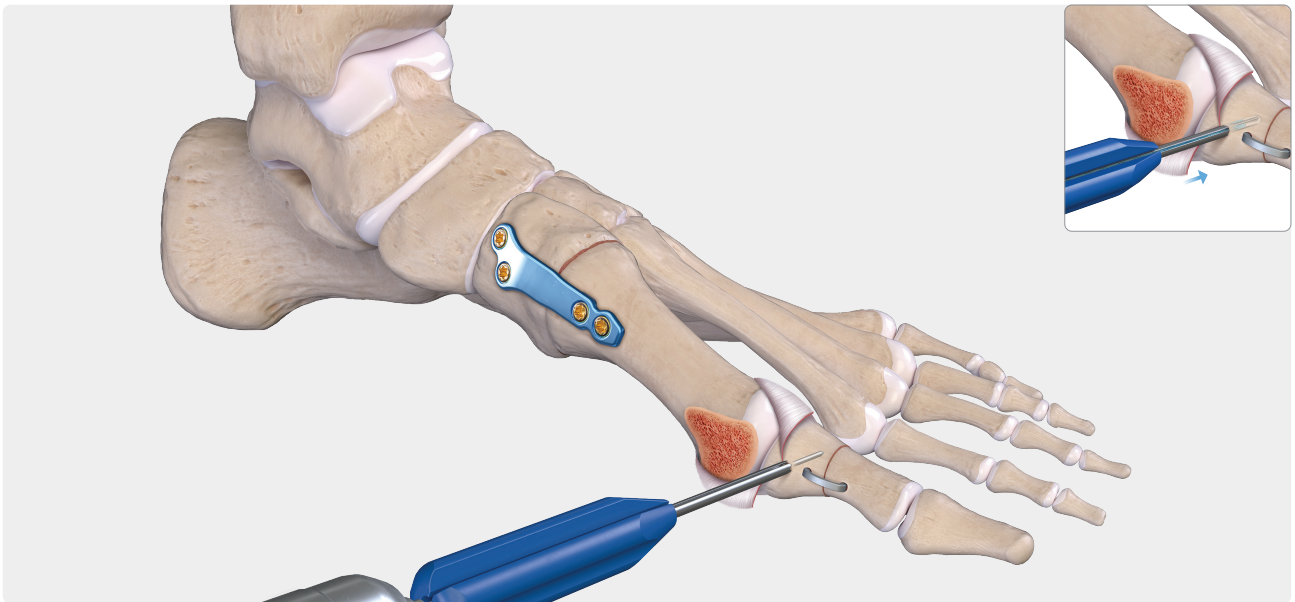
Surgical Technique



01

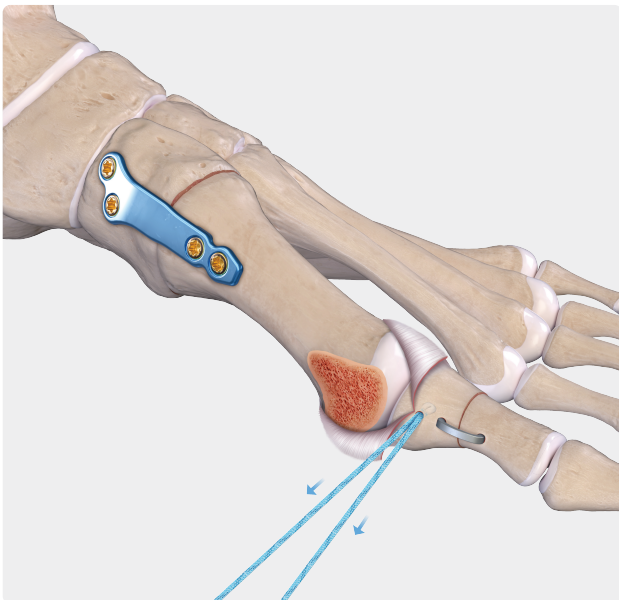
Once the primary fixation for the bony correction of the hallux valgus deformity is complete, including resection of the medial eminence*, identify the two medial bony landmarks. Mark the central point on the metatarsal, approximately 2 cm proximal to the MTP joint. Mark a similar point on the proximal phalanx, this time approximately 1 cm distal to the MTP joint.

*This technique details the Lapidus procedure combined with an Akin osteotomy; however, other procedures can be used.



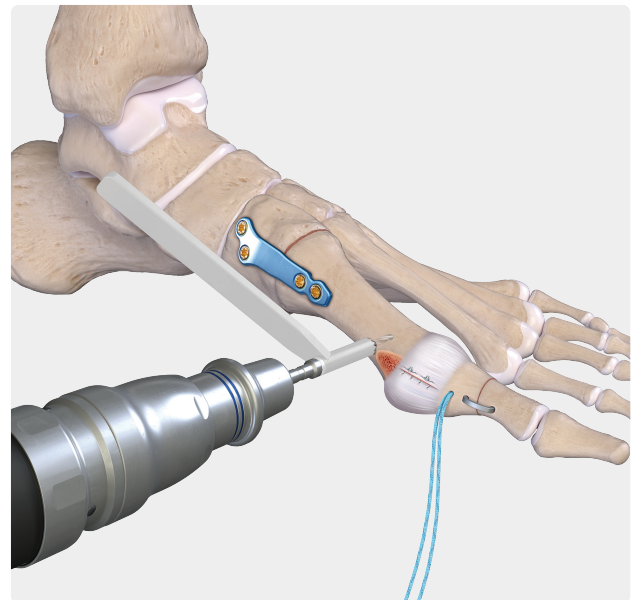
02

Starting at the proximal phalanx approximately 1 cm distal to the MTP joint, place the drill guide for the DX FiberTak® anchor slightly plantar to the midline and insert a 1.6 mm K-wire drill until the stop. Remove the K-wire drill, leaving the guide in place, and insert the DX FiberTak anchor, using a mallet until the handle meets the inserter.



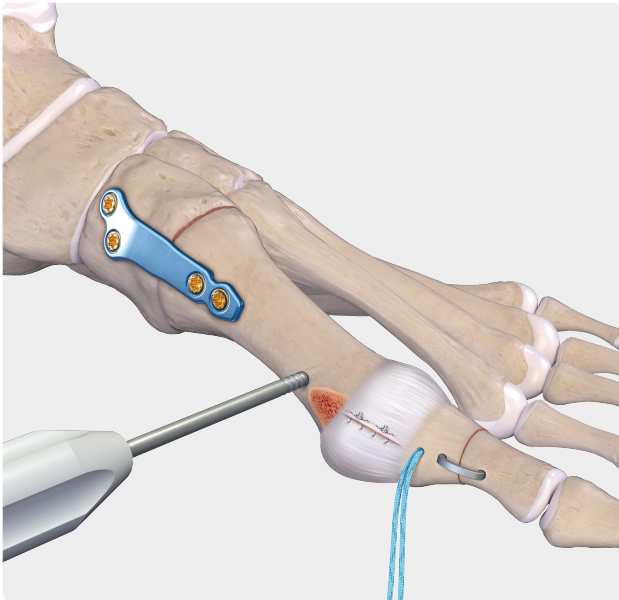
03

Remove the inserter and drill guide before seating the anchor by lightly pulling on the SutureTape axially.



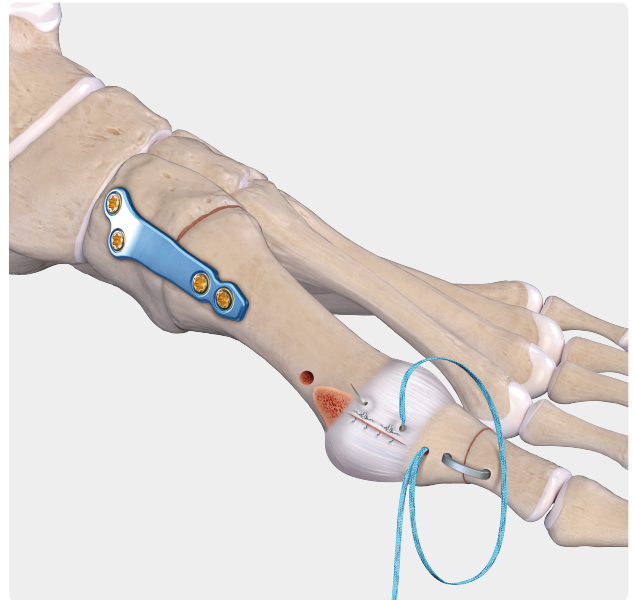
04

Complete the primary repair and closure of the capsule using the suture of your choice. Approximately 2 cm proximal to the 1st MTP joint, place the guide and drill for the 3.5 mm SwiveLock® anchor using the solid 2.7 mm drill (guidewire and cannulated drill options included).



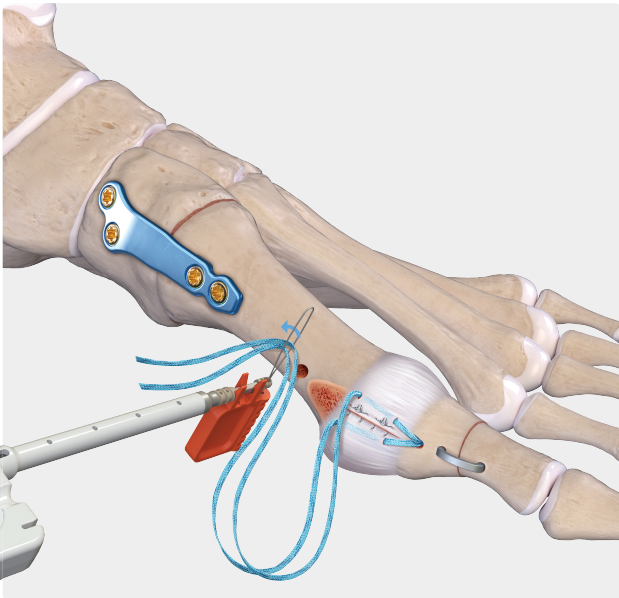
05

Tap using the 3.5 mm SwiveLock® bone tap until you reach the laser line. If using the optional guide, stop tapping when you reach the laser line.



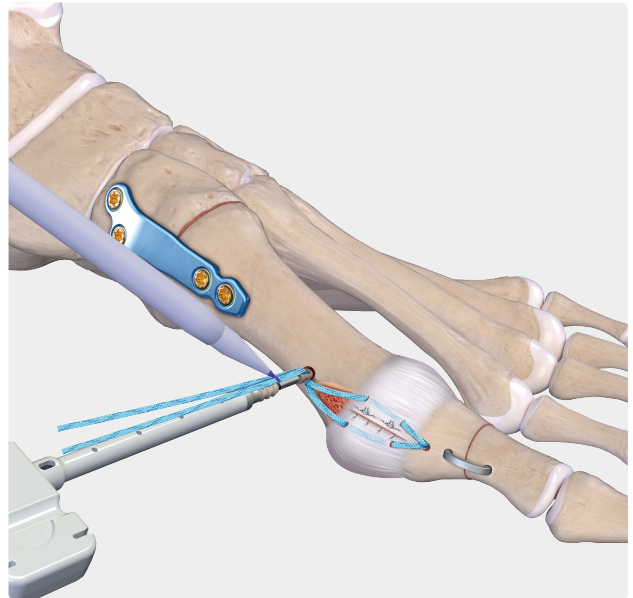
06

Pass the two limbs of collagen-coated 1.3 mm SutureTape, one dorsomedial and one plantar-medial, through the capsule.



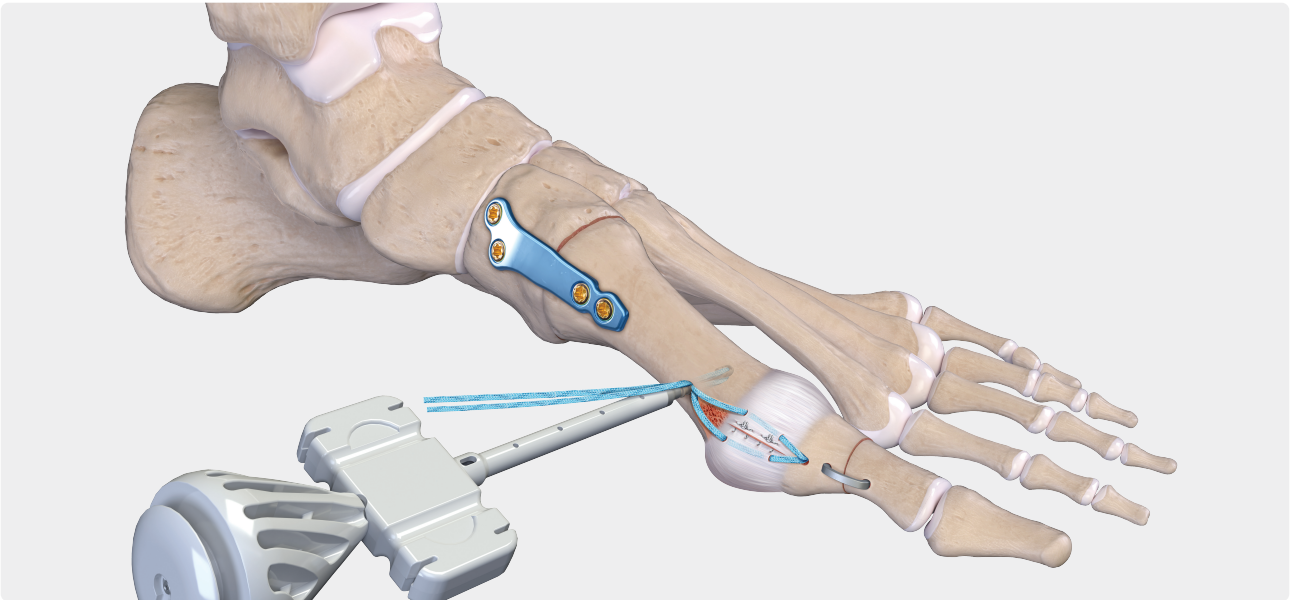
07

Prior to final fixation, pass the two limbs of collagen-coated 1.3 mm SutureTape through the SwiveLock eyelet using the orange suture threader.



08

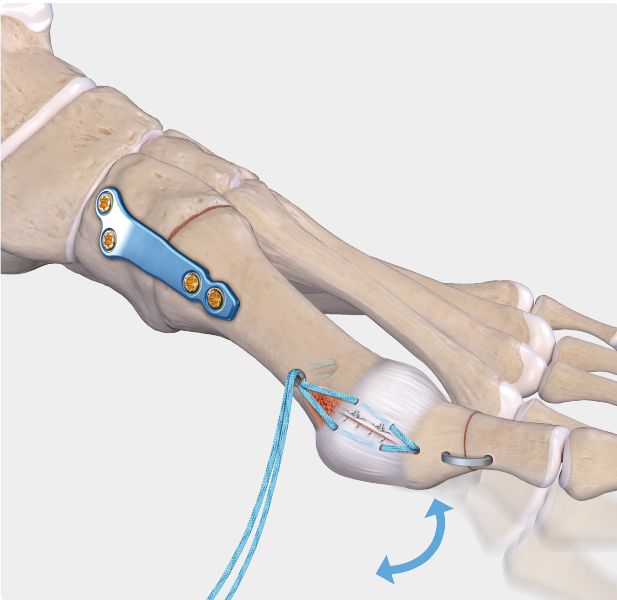
Hold the great toe at neutral or -5° of valgus. Pull the SutureTape limbs to the desired tension and mark the sutures in line with the laser line, distal to the anchor on the inserter.



09

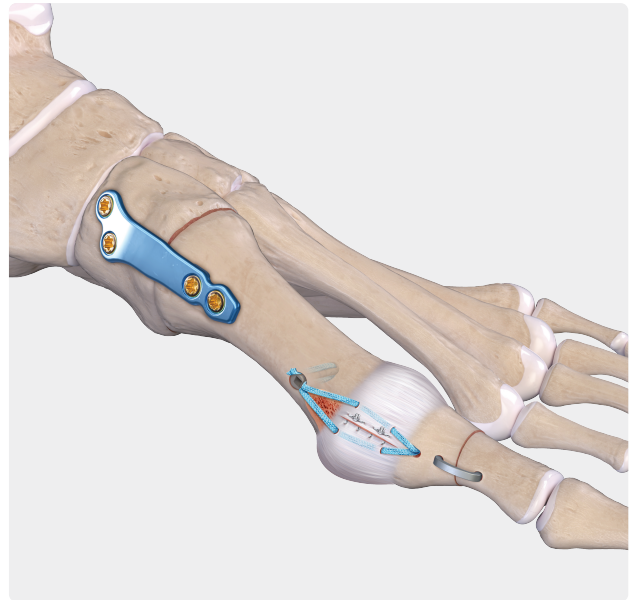
Insert the SwiveLock® inserter into the bone tunnel until the screw is level with bone. Advance the anchor using the standard SwiveLock insertion technique.

| **Note:** Do not countersink the anchor to maximize cortical purchase.



10

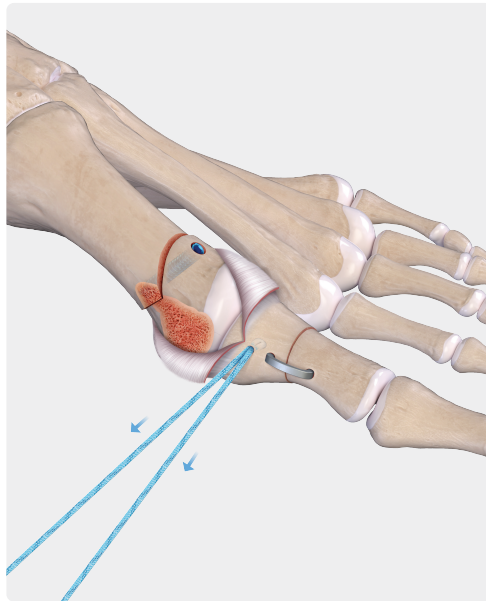
Pull back on the SwiveLock anchor to remove the inserter and ensure the 1st MTP joint still has the appropriate sagittal plane range of motion.



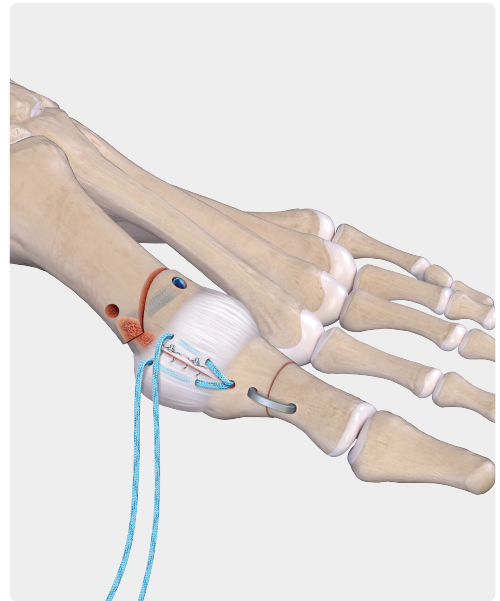
11

Cut the SutureTape sutures flush with bone to complete the repair and proceed to skin closure.

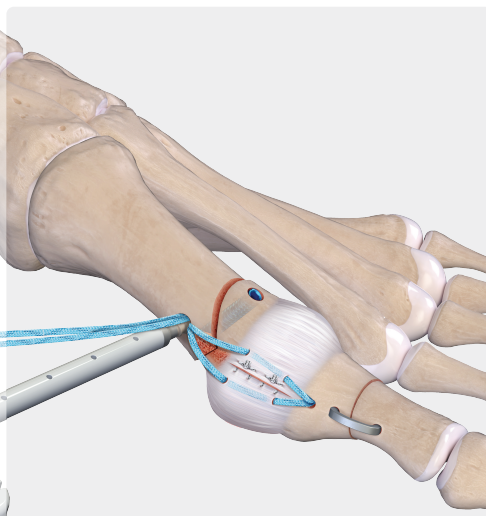
Surgical Technique Demonstrated With Distal Chevron and Akin Osteotomies



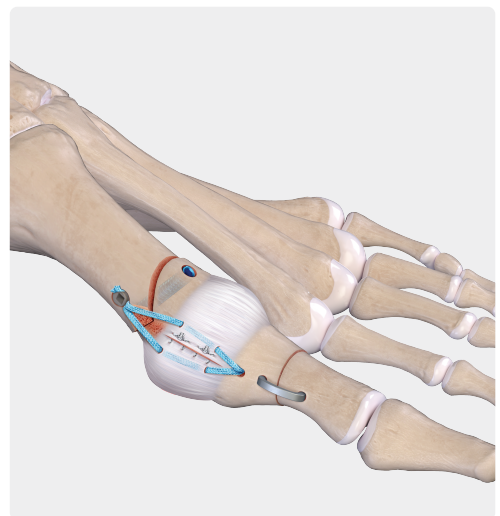
Lightly pull on the SutureTape sutures axially to remove the inserter and drill guide before seating the anchor.



Pass the two limbs of collagen-coated 1.3 mm SutureTape, one dorsomedial and one plantar-medial, through the capsule.



Insert the SwiveLock® inserter into the bone tunnel until the screw is level with bone. Advance the anchor using the standard SwiveLock insertion technique.



Cut the SutureTape sutures flush with bone to complete the repair and proceed to skin closure.

Finally, remove the 2 in × 5 in single-layer JumpStart® wound dressing from the sterile package. If necessary, trim the dressing so that it extends 1 to 2 cm beyond both the top and bottom of the incision. Apply saline or hydrogel to the dotted side of the dressing. Place the dressing over the incision with the dotted side facing down, ensuring the dots are in direct contact with the incision. Cover the back side of the JumpStart wound dressing with moistened gauze to maintain a moist environment and keep the dressing activated.

Ordering Information

BunionBrace™ Medial Capsule Repair System (AR-1798PJ-CP)

JumpStart® antimicrobial wound dressing (a)

Guidewire w/ trocar tip, 0.053 in × 5 in (b)

Drill bit, 1.6 mm (c)

SwiveLock® drill guide w/ metal insert (d)

Tap for 3.5 mm SwiveLock anchor (e)

DX FiberTak® anchor w/ collagen-coated SutureTape w/ needles (f)

SwiveLock anchor, closed eyelet, 3.5 mm × 10 mm (g)

Drill bit, 2.7 mm (h)

Drill bit, cannulated, 2.7 mm (i)

DX FiberTak drill guide (j)



Reference

1. Arthrex, Inc. Data on file (APT-07191). Naples, FL; 2018.

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 or outcomes.



Arthrex manufacturer, authorized representative, and importer information (Arthrex eIFUs)



US patent information