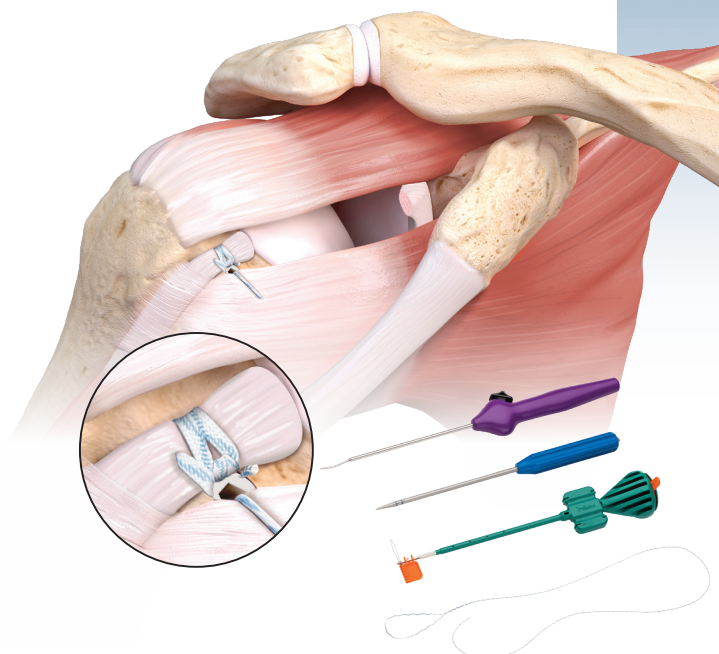


# SCOPE THIS OUT

A Technical Pearls Newsletter for Orthopedists.....



## Loop 'N' Tack™ Tenodesis Implant System

In a simple, convenient kit, the Loop 'N' Tack tenodesis implant system includes everything needed to perform a Loop 'N' Tack biceps tenodesis. Three anchor versions are available: 3.9 mm BC SwiveLock®, 4.75 mm BC SwiveLock, and 2.9 mm BC PushLock® anchors.

Each implant system contains a biocomposite anchor, FiberLink™ SutureTape, and the necessary single-use drills, drill guides, and punches. The system also includes a new SwiftStitch™ suture passer specifically designed to create a Loop 'N' Tack stitch with one simple instrument.

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<https://arthrex.info/digitalSTO>



## New IOBP® Decompression Device

The IntraOsseous BioPlasty® (IOBP) procedure is principally dependent on the concept of decompressing a bone marrow lesion and delivering a biologic graft to aid in the repair of the subchondral bone. The new IOBP decompression device expands the Arthrex portfolio to support new and innovative approaches to achieve core decompression. This 7 mm decompression device, available in knee and hip lengths, operates similarly to the FlipCutter® II cutting design and features a similar trigger mechanism as the PowerPick™ device.

## Apollo<sup>RF</sup>® SJ50 Probe Features and Benefits

The new Apollo<sup>RF</sup> SJ50 probe is the first small joint RF probe with optimized aspiration to help improve clinical performance. Based on global research, the SJ50 incorporates the outstanding performance of the Apollo<sup>RF</sup> MP50 probe into a length and diameter specifically designed for small joint arthroscopy.

- Optimized aspiration to remove tissue particulate and maintain ideal fluid temperatures
- Reduced probe dimensions for ease of access in small joints
- Anatomic 50° tip configuration to reach confined ankle anatomy (eg, posterior tibiotalar joint)
- 360° edge control for precise debridement
- Low default ablation setting of 4 for reduced energy delivery
- Flat electrode face provides gentle ablation for sculpting or smoothing techniques



# Distal Extremities

## DynaNite® FlexWire

The DynaNite FlexWire is a nitinol K-wire that uses the superelastic properties of nitinol to improve upon standard K-wire fixation for hammertoe correction. Similar to other nitinol products, the FlexWire can be bent and will return to its original straight position with improved durability.<sup>1</sup> This two-zone wire has one superelastic end and one bendable end. The superelastic end of the wire helps maintain correction by returning to its manufactured straight position. The bendable end is left distally out of the toe to be bent, cut, and capped in a standard fashion. Surgeons have the option to cut the wire to end at the base of the proximal phalanx or to cross the MTP joint.

**Reference**

1. Arthrex, Inc. Data on file (APT-04336). Naples, FL; 2019.



## MaxForce™ MTP Fusion Plating System

The MaxForce MTP plates allow for maximized compression of the arthrodesis site via two modes of compression. In addition to a standard oblong compression hole with eccentric drilling, these plates use a unique mechanism that allows surgeons to manually dial in compression across the joint. Together, these two modes allow for up to 34 lb of combined compression.<sup>1</sup> The teeth in the plate align with the teeth on the compression device to work like gears. As the compression device is turned clockwise, the plate shifts proximally, compressing the MTP joint.



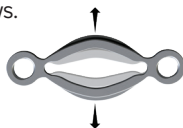
**Reference**

1. Arthrex, Inc. Data on file (APT-04668). Naples, FL; 2020.

## DynaNite Nitinol Compression Plates

The DynaNite nitinol compression plates use the superelastic principles of nitinol to create dynamic compression across a fusion site. Each plate comes packaged in a compression device that narrows the bridge and lengthens the plate. As the compression device is removed, the bridge is allowed to widen to its manufactured state due to the superelastic properties of the nitinol plate. As the plate widens and shortens, it creates dynamic compression across a fusion site when fixated with screws.

The DynaNite nitinol compression plates are intended to be used in conjunction with the Arthrex Compression FT screws.



# Imaging & Resection

## Introducing the New DrillSaw Sports 400™ System Sterilizable Battery

With the introduction of the sterilizable battery (AR-400SB), the DrillSaw Sports 400 power system now aligns with our major competitors. This battery is designed to meet the industry-standard rigors of both the autowasher and autoclave environments. Further simplicity lies in the ability to take what previously required 3 parts (UBH/ATK/battery) into a single part (AR-400SB).



- Wrapped and unwrapped sterilization parameters available
- Latest generation of lithium-ion technology for powerful energy release
- Strong PEEK material for durability
- Compatible with existing AR-400UBC battery charger
- Will require new charging bays (AR-400UBC-S4) with upgraded and improved communications
- Gold-plated contacts on battery for efficient energy exchange
- Industry-standard 90-day warranty



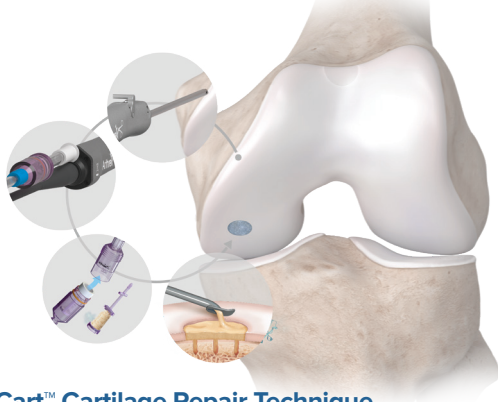
## Synergy OR Command™ Room Status

Arthrex is proud to introduce the next-generation OR Command room status platform, the latest expansion of the Synergy Integration™ integration solution product line. With a dashboard view of video streams from the OR, Synergy OR Command video streaming allows staff to access the system via a web browser on their facility-connected PCs. In addition, administrative users can use the Synergy OR Command kiosk mode, which displays the dashboard without automatically logging out the user. Using this functionality, the setup appears on a dedicated display in an OR corridor, enabling staff to get an overview of room status at a glance.

Additionally, the newly redesigned user interface allows staff to drill down into individual rooms to see a larger room status view. Staff can also toggle Privacy Mode for each video feed.

Since Synergy OR Command room status is installed on the facility network and is accessible via web browser, staff can view updated room status remotely, such as in a physician's lounge, a conference room, an observation room, and the charge desk. This remote accessibility becomes even more important as reduction of personnel in the OR space is required.



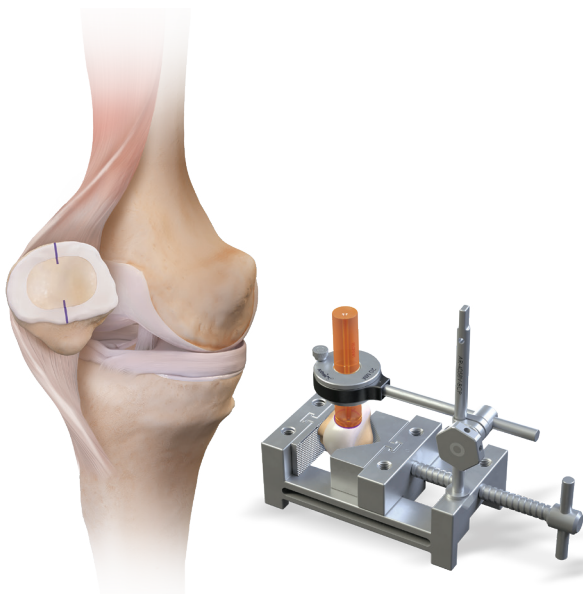


### AutoCart™ Cartilage Repair Technique

The AutoCart procedure offers an autologous approach to cartilage repair. Autologous cartilage particulate is retrieved and collected using the GraftNet™ tissue collector and then reimplanted in a single-stage procedure. The autologous cartilage particulate collected with the GraftNet device may be combined with BioCartilage® extracellular matrix and autologous fluid to prepare a graft that offers biologic scaffolding for tissue repair. For graft fixation, autologous thrombin may be used to stabilize the repair.

### Allograft OATS® and BioPatella™ OATS System

As a widely adopted treatment for full-thickness articular cartilage defects with bony involvement, the allograft OATS technique has been redefined with several new and innovative features. The instrumentation system now includes an improved vice workstation with several features and accessories available, improved recipient site reamers with depth-stop features, and the new BioPatella technique and instrumentation to address large patellar defects.



BioPatella Technique



### 1.7 mm FiberTape® and TigerTape™ Suture

FiberTape suture is now available in a smaller width and lower profile, with both ends tapered to a round size 0 FiberWire® suture. This new 1.7 mm FiberTape and TigerTape suture is available in a 36-inch length and a 30-inch overall length with an 8-inch working length.

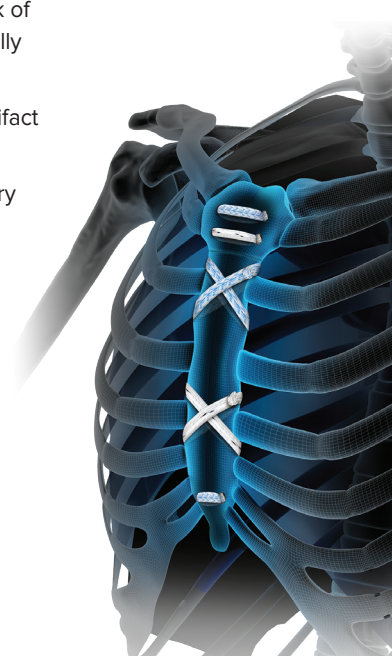
- New lower profile and smaller width with a size 0 FiberWire core
- Alternative to any use of 2.0 mm FiberTape suture
- Compatible with all implants and instruments used for current FiberTape suture
- Fits through the eyelet of a 2.9 mm PushLock® anchor

### FiberTape Sternal Closure

Used for more than 10 years in multiple orthopedic applications, the FiberTape implant is now FDA cleared for sternal closure. Composed of UHMWPE and polyester weave, the FiberTape sternal closure implant delivers uncompromising strength and a broad footprint for better bone compression compared to conventional metal wires.<sup>1</sup> Advantages that can be expected from a nonmetallic construct include:

- No sharp metal ends, removing the risk of wire-stick injuries for staff and potentially minimizing irritation for patients
- 100% radiolucent, eliminating metal artifact on x-ray
- Sutures can easily be removed if reentry or a second procedure is necessary

Implanting the FiberTape sternal closure implant is straightforward and offers consistent, controlled tensioning for optimal sternal closure.



#### Reference

1. Arthrex Inc. LA1-000131-en-US\_A. Naples, FL; 2020.



## FiberTag® TightRope® Implant Kits With FlipCutter® III Drill

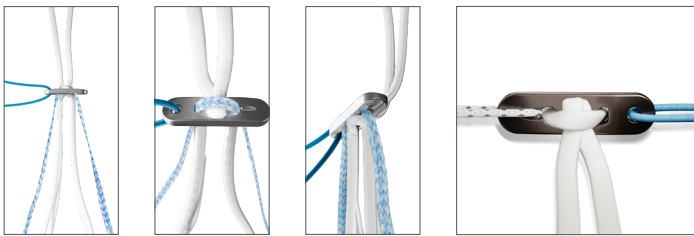
New FiberTag TightRope implant kits conveniently package together several components required for quad tendon ACL reconstruction. By including the new adjustable FlipCutter III drill, a FiberTag TightRope implant, and a #2 FiberStick™ suture all in one package, facilities will increase efficiency and reduce inventory, freeing up shelf space to store other products. Cost-conscious surgeons and facilities will appreciate the convenience of an all-in-one kit compared to maintaining stock of multiple individual items, while surgeons and staff can be confident that they have everything they need for their cases.



**Includes one each:**

- FlipCutter III Drill
- FiberTag TightRope Implant
- #2 FiberStick Suture

## TightRope® II Implant



As the first adjustable-loop cortical suspensory fixation implant to use a flat tape design, the ACL TightRope II implant offers improved handling characteristics, greater resistance to graft abrasion, and improved biomechanics.<sup>1</sup> To accommodate various graft types and techniques, the TightRope II implant is available in the following configurations: RT with or without an *Internal/Brace*™ implant, BTB with or without an *Internal/Brace* implant, ABS, and open ABS.

- Flat tape TightRope II loop is stronger than round sutures and creates a broader suture-graft interface; flat tensioning strands offer improved handling characteristics during tensioning and reduce graft abrasion<sup>1</sup>
- Redesigned cortical button now incorporates a proprietary knotless fifth locking mechanism, which increases strength and resistance to cyclic displacement<sup>2</sup>
- Precise graft tensioning, offered only by the ACL TightRope II implant, allows for retensioning of the graft after fixation is complete and the knee has been cycled

**References**

1. Arthrex, Inc. Data on file (LA1-00038-EN\_B). Naples, FL; 2017.
2. Arthrex, Inc. Data on file (APT-G01155). Munich, Germany; 2020.

## New 3.9 mm SwiveLock® MPFL Kits

The new 3.9 mm SwiveLock MPFL kits represent an advance in anatomic double-bundle MPFL reconstruction. These convenient, comprehensive kits come with new, smaller 3.9 mm BioComposite SwiveLock anchors for patellar graft fixation and include options for surgeons who prefer a 6 mm × 20 mm BioComposite FastThread™ interference screw or an ACL TightRope® implant for suspensory femoral fixation.

- New 3.9 mm BioComposite SwiveLock anchor minimizes bony removal and implant size in the patella while offering improved fixation strength over smaller sub-4 mm implants
- Improved, shorter femoral BioComposite FastThread interference screws with prominent leading thread and large thread pitch facilitate screw engagement and advancement while decreasing material by 22% without losing fixation strength<sup>1,2</sup>
- Features new double-barrel drill guides for consistent and accurate guide pin placement, allowing surgeons to easily and repeatedly create parallel, converging, or diverging patellar sockets with predetermined spacing

**References**

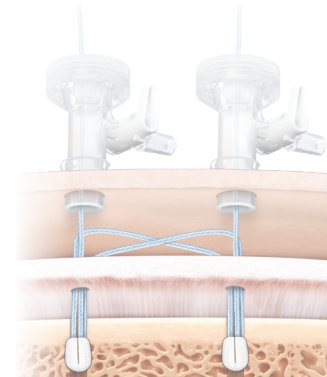
1. Arthrex, Inc. Data on file (Engineering department calculation of volume). Naples, FL; 2018.
2. Arthrex, Inc. LA1-00099-EN\_A. Naples, FL; 2018.

## Gluteus Medius Tendon Repair



The hip abductor tendon compression bridge technique is intended to repair partial-thickness undersurface tears of the gluteus medius tendon. This bridging

technique enhances footprint compression to maximize tendon-to-bone healing. The Gluteus Medius Repair Implant System uses two interconnected 2.6 Knotless FiberTak® soft anchors to create a bridge over the partially torn tendon. This bridge construct is created through a transtendinous approach, providing a reproducible repair with minimal damage to the abductor tendons.



## New FiberStitch™ Implant Products/Line Extension

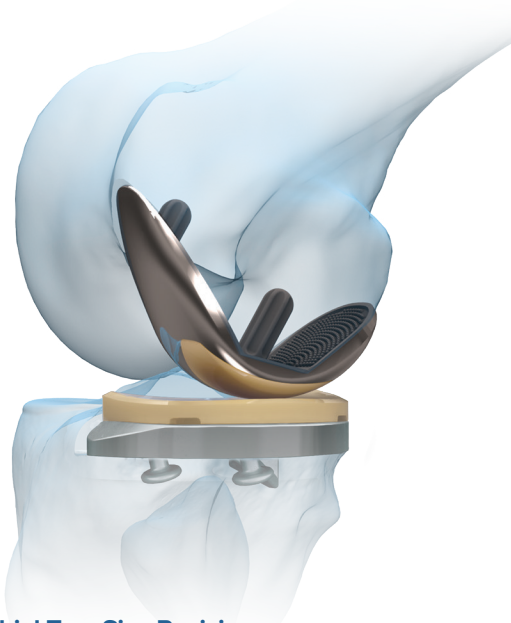
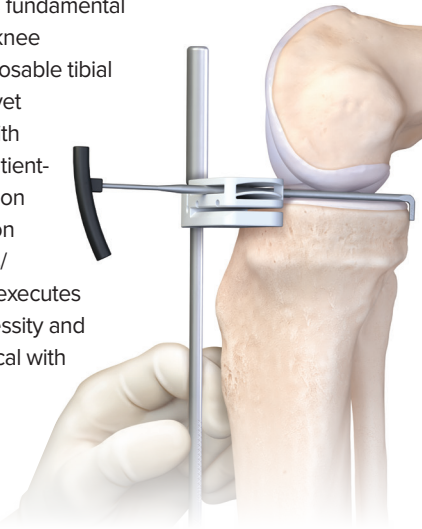
Replace hard plastic PEEK implants from an all-inside meniscus repair with the revolutionary all-suture FiberStitch implant. Arthrex offers the most comprehensible all-inside meniscus repair options with soft all-suture implants. Access and repair meniscus tears with the various angled FiberStitch implant options now available. In addition to the 12° up-curved delivery needle, a 24° up-curve, a reverse curve, and a straight option are now available.





## Disposable Tibial Cutting Guide

Reproducible tibial resection is fundamental to the success of unicondylar knee replacement surgery. The disposable tibial cutting guide is an innovative yet simplistic device that assists with tibial resection by providing patient-specific tibial slope and resection level while allowing the surgeon control over rotation and varus/valgus alignment. This device executes accurate cuts without the necessity and cost of advanced imaging typical with patient-specific devices.



## iBalance® UKA Tibial Tray Size Revision

While subtle, 3 impactful changes have been made to the iBalance UKA tibial tray.

- Increased AP dimension provides additional cortical support and alignment
- Posteriorly angled lugs aid in the dynamic insertion of the implant
- Anterior aspect built up to match the chamfer in the bearing



## Eclipse™ SpeedScap™ Implant System and Technique

Maximizing subscapularis repair is paramount in anatomic total shoulder arthroplasty. Rotator cuff repair (RCR) with a knotless, double-row construct has been shown to significantly improve clinical and patient-reported outcomes.<sup>1</sup> The Eclipse SpeedScap implant system and technique:

- Provide excellent biomechanical, time-zero fixation<sup>2</sup>
- Are comparable to well-known techniques for knotless, double-row RCR
- Offer, in conjunction with the anchor targeting trunnion adapter, reproducible repair method

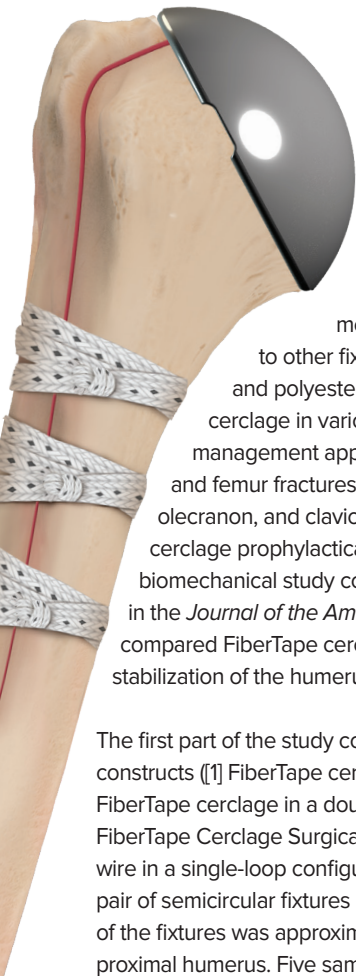
This system, which offers biomechanical strength equivalent to the Univers™ Apex subscapularis and FiberTape® tendon compression bridge repairs,<sup>2-4</sup> includes:

- FiberTak® DR anchors and 3.9 mm PEEK SwiveLock® anchors (with accompanying drills) specifically designed for open shoulder surgery
- FiberLink™ SutureTape with free needle for suture passage and SutureTape for rotator interval closure



### References

1. Pogorzelski J, Fritz EM, Horan MP, et al. Minimum five-year outcomes and clinical survivorship for arthroscopic transosseous-equivalent double-row rotator cuff repair. *J Am Acad Orthop Surg.* 2019;27(24):e1093-e1101. doi:10.5435/JAAOS-D-18-00519
2. Werner BC, Griffin JW, Thompson T, Lendthey M, Higgins LD, Denard PJ. Biomechanical evaluation of two techniques of repair after subscapularis peel for stemless shoulder arthroplasty. *J Shoulder Elbow Surg.* 2021. doi:10.1016/j.jse.2021.01.037
3. Denard PJ, Noyes MP, Lädermann A. A tensionable method for subscapularis repair after shoulder arthroplasty. *JSES Open Access.* 2018;2(4):205-210. doi:10.1016/j.jseas.2018.08.003
4. Lederman E, Streit J, Idoine J, Shishani Y, Gobezie R. Biomechanical study of a subscapularis repair technique for total shoulder arthroplasty. *Orthopedics.* 2016;39(5):e937-e943. doi:10.3928/01477447-20160623-09



## FiberTape® Cerclage: A Tested Alternative to Metal Cerclage

FiberTape cerclage is a 100% nonmetallic substitute for metal wires and cables commonly used in orthopedics as a primary means of fracture stabilization or as an adjunct to other fixation devices. Composed of UHMWPE and polyester weave, surgeons are using FiberTape cerclage in various trauma and joint arthroplasty fracture-management applications, such as periprosthetic humerus and femur fractures, as well as fractures of the fibula, patella, olecranon, and clavicle. Surgeons are also using FiberTape cerclage prophylactically during total joint procedures. A 2-part, biomechanical study conducted by Denard et al, recently published in the *Journal of the American Academy of Orthopaedic Surgeons*, compared FiberTape cerclage to stainless steel wire cerclage for stabilization of the humerus during shoulder arthroplasty.<sup>1</sup>

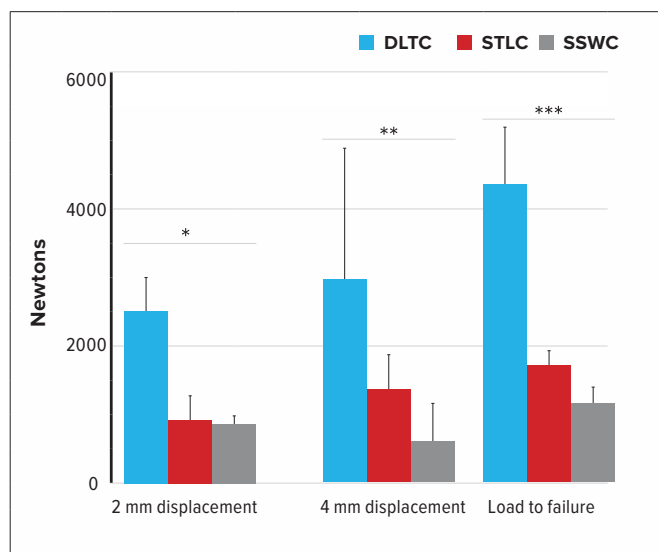
The first part of the study consisted of a distraction test of three different constructs ([1] FiberTape cerclage in a single-loop configuration; [2] FiberTape cerclage in a double-loop configuration [as described in the FiberTape Cerclage Surgical Technique Guide]; [3] 18 ga stainless steel wire in a single-loop configuration). Samples were secured around a pair of semicircular fixtures spaced 2 mm apart. The total circumference of the fixtures was approximately 10 cm, simulating the diameter of the proximal humerus. Five samples per group were cycled 50 N to 500 N for 50 cycles with a subsequent pull to failure. Displacement during cyclic loading, load to 2 mm and 4 mm displacement and load to failure were measured. The FiberTape cerclage passed in a double-loop configuration exhibited lower displacement ( $0.6 \pm 0.2$  mm) after cyclic loading compared to the single-loop FiberTape cerclage ( $1.6 \pm 0.4$  mm) and the metal wire construct ( $0.9 \pm 0.1$  mm). Furthermore, double-looped FiberTape cerclage produced significantly higher load to failure ( $4360 \pm 463$  N) and loads to 2 mm and 4 mm displacement ( $2401 \pm 483$  N and  $2906 \pm 1872$  N). These results reinforce that passing FiberTape cerclage around the bone twice maximizes its biomechanical performance.

In the second part of the study, a subsidence test was performed on 12 cadaveric humeri. First, an osteotomy was performed and secured with a FiberTape cerclage (double-loop configuration) or a stainless steel wire placed 20 mm distal to the medial calcar. Next, a conical wedge, simulating the stem of a reverse shoulder arthroplasty, was advanced 20 mm at a rate of 0.2 mm/s into the humeral canal. Load at 20 mm subsidence was measured and gap formation at the osteotomy site was observed via video tracking. FiberTape cerclage exhibited significantly lower gap displacement at 20 mm subsidence ( $0.33 \pm 0.31$  mm vs  $0.77 \pm 0.23$  mm), but there was no significant difference in load between the two.

In conclusion, this study shows FiberTape cerclage exhibits substantially higher loads to failure and tends to demonstrate lower gap displacements compared to stainless steel wires.

### Practical Issues

- Broader contact area with potentially lower risk of cutting into soft bone
- No radiographic interference
- Eliminates the risk of wire-stick injuries
- Potentially less traumatic to surrounding soft tissue
- No chance of metallosis
- Easily removable, if necessary



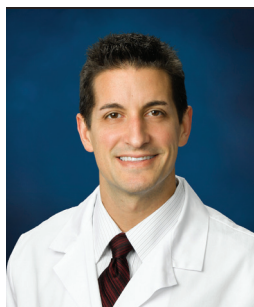
Load to failure and maximum compression  
P values for total displacement: \* $P = 0.033$ , \*\* $P < 0.001$ , \*\*\* $P < 0.0001$   
DLTC = double-looped tape cerclage; SLTC = single-looped tape cerclage;  
SSWC = stainless steel wire cerclage

Adapted from Denard PJ, Nolte PC, Millett PJ, et al. *J Am Acad Orthop Surg*. doi:10.5435/JAAOS-D-20-00047

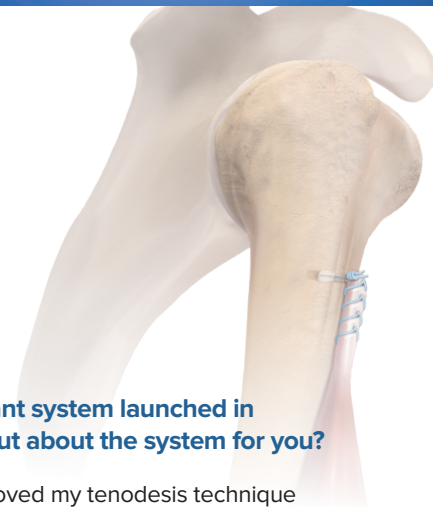
### Reference

1. Denard PJ, Nolte PC, Millett PJ, et al. A tensionable suture-based cerclage is an alternative to stainless steel cerclage fixation for stabilization of a humeral osteotomy during shoulder arthroplasty [published online September 17, 2020]. *J Am Acad Orthop Surg*. 2020;10.5435/JAAOS-D-20-00047. doi:10.5435/JAAOS-D-20-00047

# What's in My Bag?



**FiberTak® Button Implant System**  
**Featuring**  
**Kevin M. Kaplan, MD** (Jacksonville, FL)



**Q: What are your indications for biceps tenodesis?**

A: The most common reasons I perform a biceps tenodesis include tears that involve >50% of the tendon, biceps instability, and recalcitrant tenosynovitis. SLAP tears in patients >30 years of age may be indicated for tenodesis as well. A physical examination certainly plays a role in indicating patients for tenodesis.

**Q: What is your primary tenodesis method?**

A: I prefer subpectoral biceps tenodesis to avoid bicipital groove pain while addressing the pain-generating pathology.

**Q: Has your tenodesis method changed over the years? If so, why?**

A: I started using tenodesis screws when performing subpectoral tenodesis but wanted to avoid the potential risk of humerus fractures. The button allowed me to have strong fixation with a much smaller drill hole, which minimized that risk and required only a small axillary incision for the approach.

**Q: The FiberTak button implant system launched in November. What stands out about the system for you?**

A: The FiberTak button has improved my tenodesis technique given the small drill hole and elimination of a metal implant. Additionally, biomechanical studies have demonstrated the FiberTak button is a stronger fixation device.<sup>1</sup> For highly competitive athletes, I'm able to use several implants to improve fixation.

**Q: What are the benefits of using the FiberTak button over other tenodesis methods?**

A: The FiberTak button requires a significantly smaller drill hole compared to drill holes for screws and it eliminates metal implants in the humeral canal.

**Q: How has the FiberTak button changed your approach to biceps tenodesis?**

A: The FiberTak system allows me to use an even smaller incision while providing a strong tenodesis through a small drill hole.

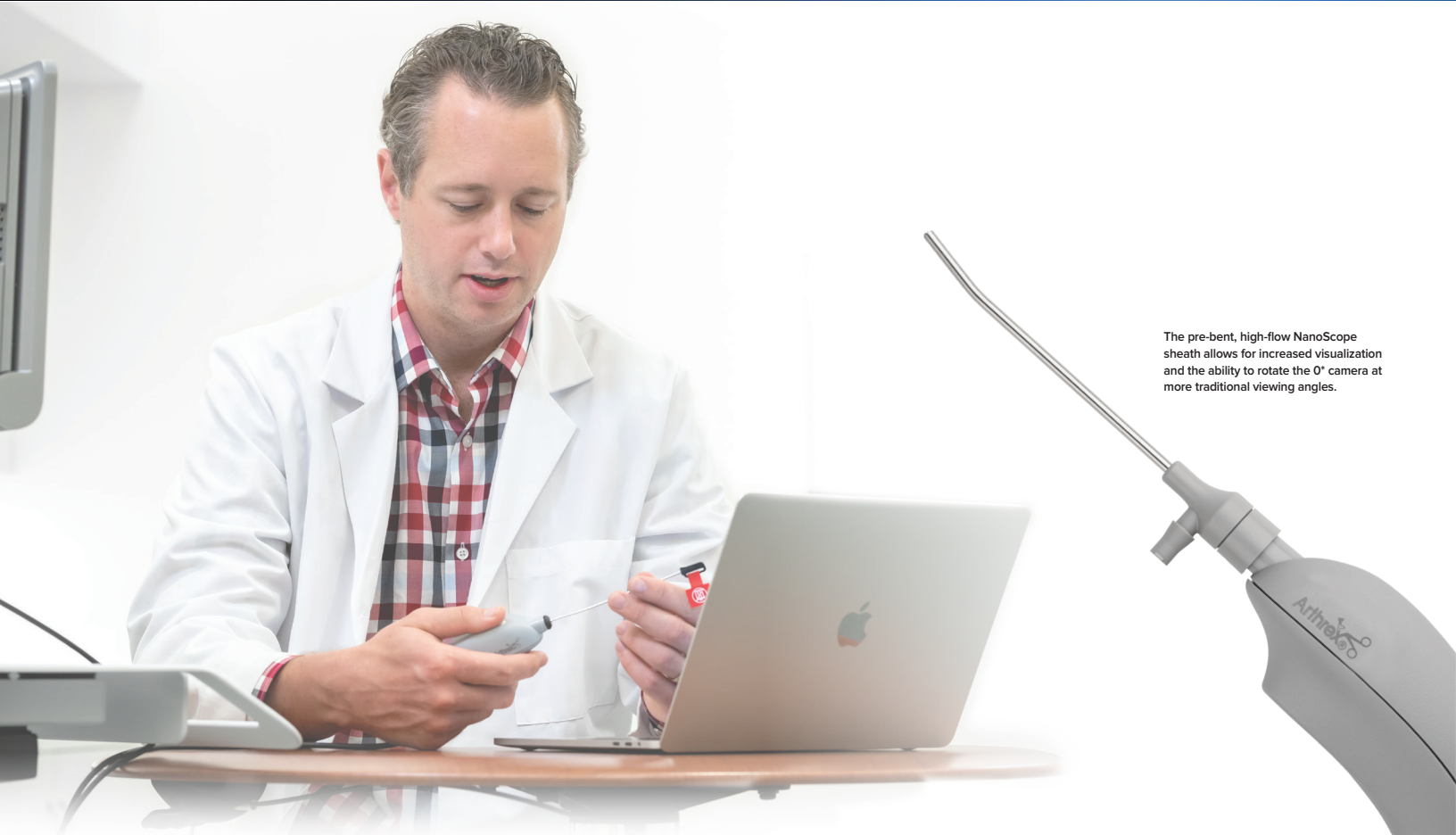


**Reference**

1. Arthrex, Inc. Data on file (APT-04066). Naples, FL; 2019.



# Pointers & Pearls



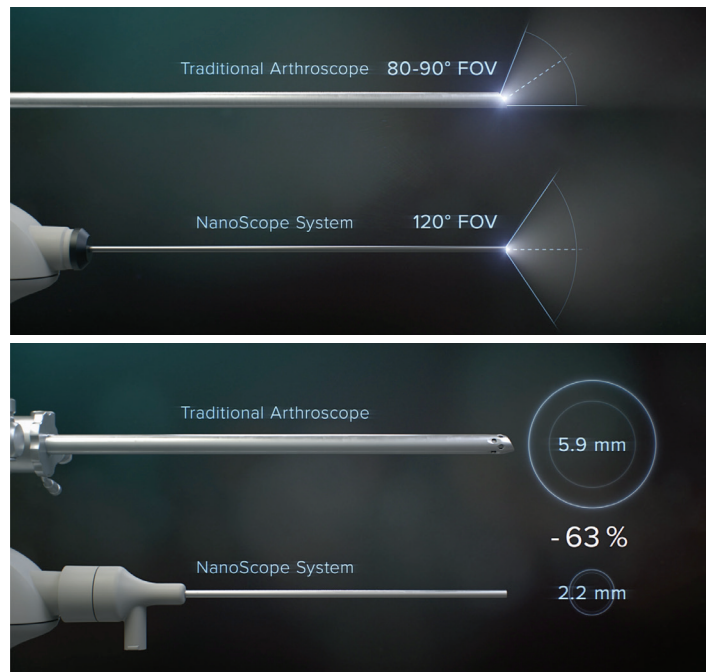
The pre-bent, high-flow NanoScope sheath allows for increased visualization and the ability to rotate the 0° camera at more traditional viewing angles.

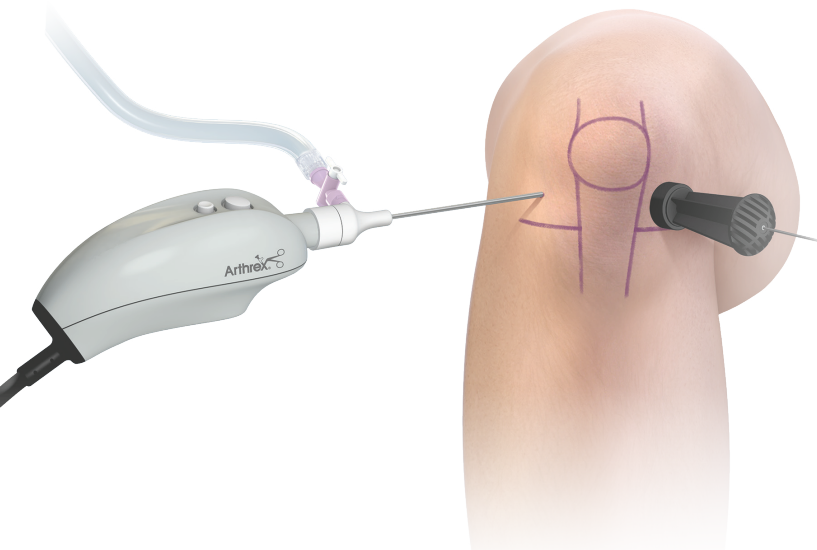
## NanoScope™ Operative Arthroscopy System

Featuring **Matt Daggett, DO, MBA** (Kansas City, MO)

**Q: Dr. Daggett, you have a lot of experience working with the NanoScope operative arthroscopy system. What are your pearls for using this product during a percutaneous ACL repair with needle arthroscopy and biological augmentation?**

A: The NanoScope system has been transformative for my patients and my practice, resulting in significantly higher patient satisfaction, reduced opioid use, faster return to recovery, and improved cosmesis. The main clinical benefits of an ACL repair are the preservation and restoration of the patient's normal anatomy and not using tendon graft from another part of the patient's body, which can lead to certain graft site complications as well as pain and weakness. Using the NanoScope system, patients seem to expect less pain because they know the camera and instrumentation are smaller than traditional arthroscopic equipment. I believe I can obtain the same great patient outcome but with a significantly improved patient experience across multiple diagnostic and therapeutic applications with the NanoScope instrumentation.





**Q: Considering the large field of view provided by the NanoScope system, are there alternative portal tips or pearls that improved your technique?**

A: As previously noted, the ability to quickly switch portals is a huge advantage of the NanoScope system. In particular, I find it advantageous to use the medial portal and accessory medial portal for both visualization and instrumentation at different times during the procedure. This allows me to place my repair tension and anchor placement for the ACL repair in a more optimal position.

**Q: What are the benefits of using the *InternalBrace*™ surgical technique for an ACL repair procedure?**

A: The *InternalBrace* ligament repair is a surgical technique that helps protect the primary repair during healing.

**Q: What opportunities do you see for the advancement of percutaneous ACL repair with the NanoScope system?**

A: I believe strongly that the future of ACL treatment will be focused on restoring the injured anatomy very quickly after injury. Future research will continue to show that ACL repair in some patients is a preferred option, and we will be treating this soft-tissue injury more like the fracture of a bone with a focus on early fixation and mobilization. I also believe biologic augmentation of repaired tissue and this technology will dramatically change the way we approach ACL tears in 4 ways:

1. Expand substantially the number of patients eligible for ACL repair
2. Reduce the complication rate from surgery itself
3. Reduce the time to full recovery and reinjury rates while improving return-to-play rates across all populations
4. Perform the procedure percutaneously without the use of narcotic pain medication

**Q: For surgeons who have yet to incorporate this technique and technology into their approach, what guidance would you provide?**

A: The NanoScope system is transformative. It takes effort from the surgeon to modify workflows and adapt to the 0° lens, but this effort is miniscule and trivial compared to the significant improvement in the patient experience across multiple applications. In fact, the improved patient experience has driven me to continuously expand my applications for using the technology, including in the setting of ACL repair. Although ACL repair is currently recommended for a small subset of ACL-injured patients, I have found the great leap in patient outcome and experience that I have witnessed with the NanoScope system in other applications, such as meniscus or cartilage surgery, holds true in ACL repair patients. It has been the joy of my career to see what a leap we are making in how we approach this injury.

**Reference**

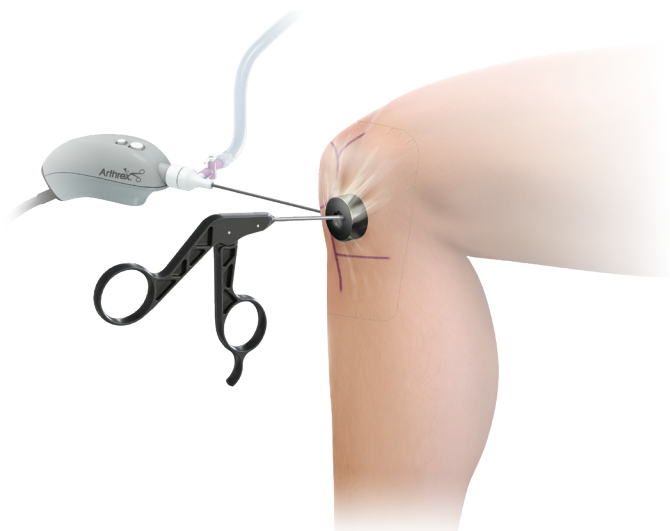
1. Branch EA, Matuska AM, Plummer HA, Harrison RM, Anz AW. Platelet-rich plasma devices can be used to isolate stem cells from synovial fluid at the point of care. *Arthroscopy*. 2021;37(3):893-900. doi:10.1016/j.arthro.2020.09.035

**Q: Can you walk us through the most critical and unique steps of performing a percutaneous ACL repair with the NanoScope™ system?**

A: The most crucial step is obtaining adequate visualization. With the NanoScope 0° angled camera, the surgeon must appreciate and be adept changing portals through the NanoCannulas. Being able to switch portals is beneficial as you can better see your repair from different angles to make sure the tension of the repair and placement of the anchors is optimal. The high-flow NanoScope sheaths allow excellent flow that feels like a traditional arthroscope.

**Q: How does integrating orthobiologic delivery into your case workflow better assist the repair technique?**

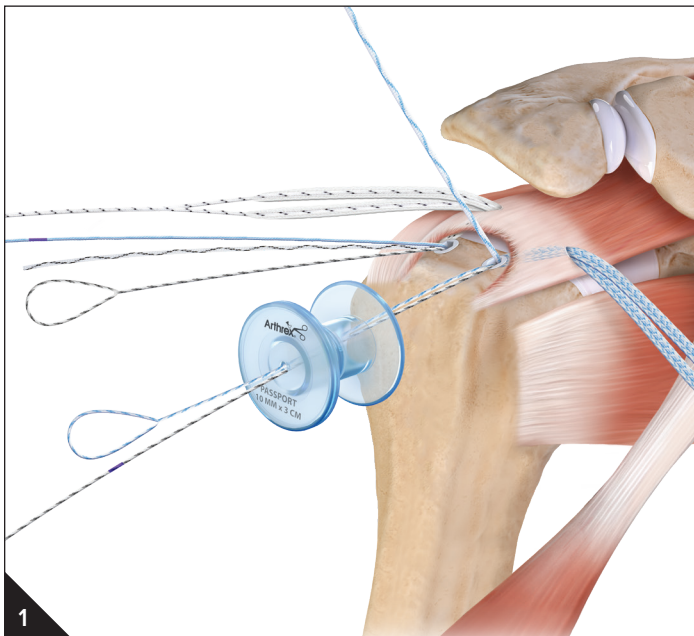
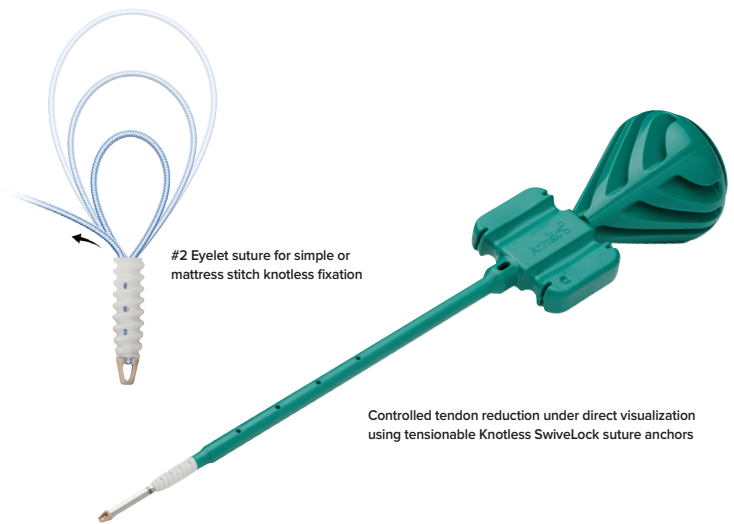
A: We know the swelling that occurs inside the knee after an ACL injury is loaded with great "stuff," including a high concentration of the body's mesenchymal stem cells and other precursors. By centrifuging these biologic by-products and using them as an adjunct in our repair, we can jump-start the body's healing process and potentially obtain better, more consistent healing of the ACL repair.<sup>1</sup>



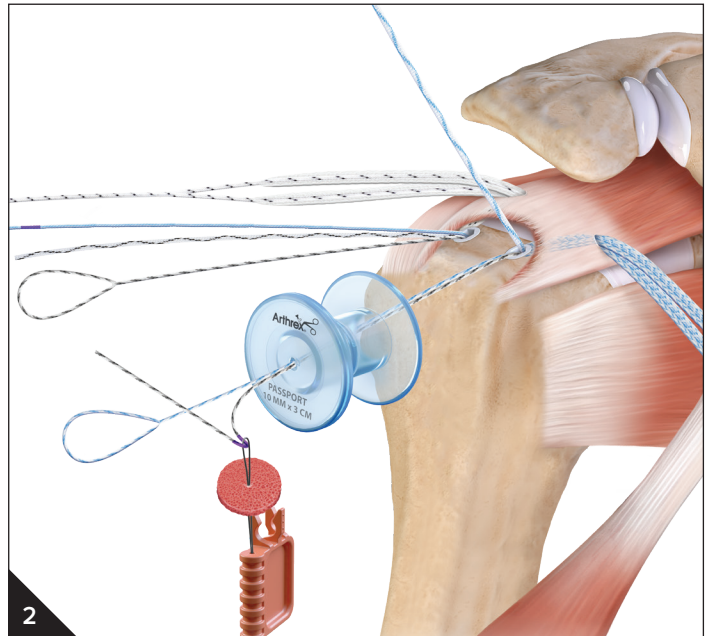
# IN THE Loop

## SpeedBridge™ Rotator Cuff Repair With Interpositional AlloSync™ Button and Knotless SwiveLock® Anchors

Trusted by physicians since 2008, the SpeedBridge double-row rotator cuff repair has been shown to significantly improve patient-reported outcomes that were durable at a minimum of 5 and 10 years postoperatively.<sup>1,2</sup> A comparative animal study demonstrated that an interposed demineralized bone matrix (DBM) sponge can lead to improved tendon-to-bone healing for rotator cuff tears.<sup>3</sup> Compared to a direct repair, healing was documented on both MRI and histologic findings.<sup>3</sup> The size and shape of the AlloSync button make it the ideal interpositional graft for rotator cuff repair. With the introduction of the Knotless SwiveLock anchor, which uses an innovative tensionable knotless suture, button delivery is simplified.

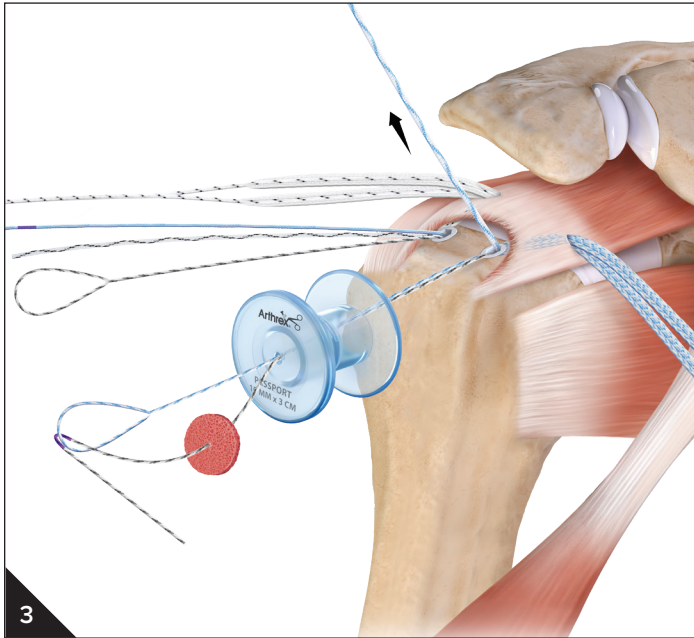


Insert two medial-row Knotless SwiveLock anchors and pass the swaged FiberTape® suture tails using a Scorpion™ suture passer. Retrieve the anterior white/black knotless repair suture and the anterior looped end of the white/blue shuttle suture from the lateral cannula.

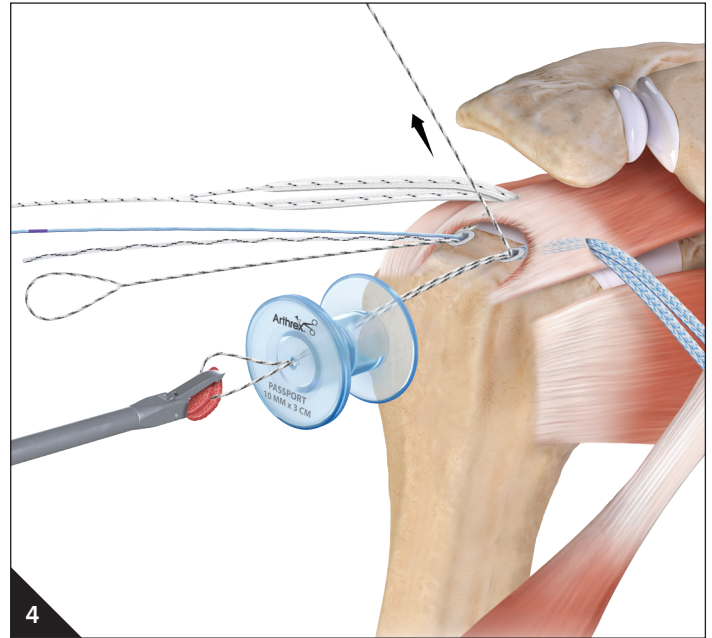


Using the suture threader tab from a lateral-row SwiveLock anchor, feed the end of the repair suture through the center of the AlloSync button graft.

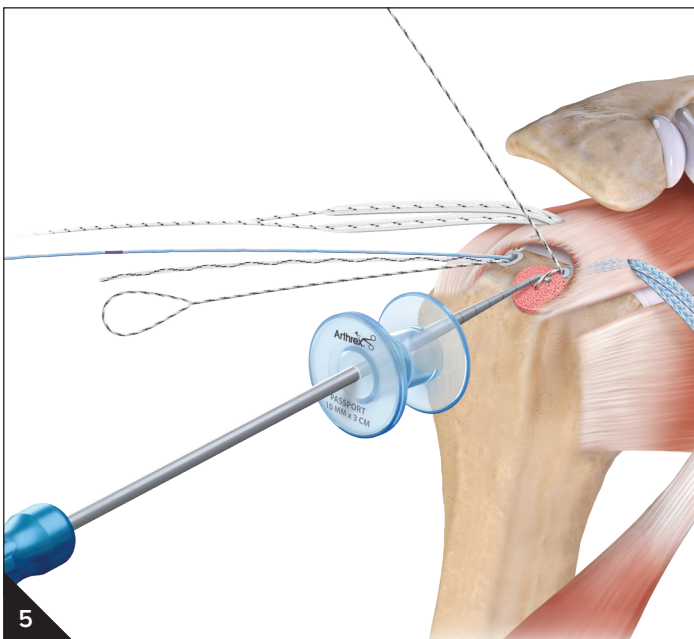




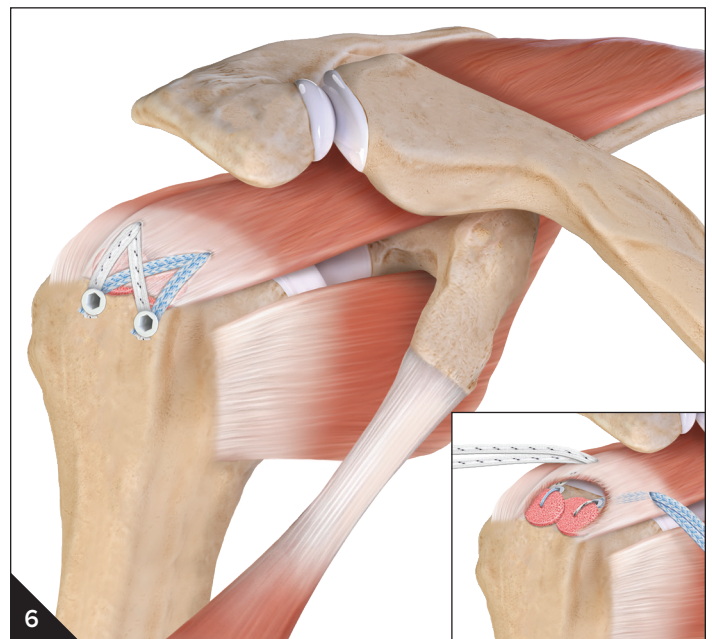
3  
Convert the knotless mechanism by feeding the end of the repair suture through the loop of the shuttle suture and folding it at the ink-mark indicator. Pull the tape suture tail of the white/blue shuttle suture to pass the repair suture into the knotless mechanism.



4  
Introduce the AlloSync™ button graft through the lateral PassPort Button™ cannula by gently pulling on the white/black tail of the knotless repair suture while pushing the graft through the cannula with a KingFisher® grasper. Once the button has passed through the cannula and is placed near the repair site, remove the KingFisher grasper.



5  
Use a probe to manipulate the graft to its desired location while final tension is applied to the knotless repair suture. Take care to prevent over-tensioning of the AlloSync button. Cut the white/black suture tail with an open-ended FiberWire® suture cutter. Repeat the steps for placing the posterior AlloSync button graft.



6  
Complete the SpeedBridge™ rotator cuff repair configuration over the interpositional AlloSync button grafts with two lateral SwivelLock anchors.

#### References

1. Pogorzelski J, Fritz EM, Horan MP, et al. Minimum five-year outcomes and clinical survivorship for arthroscopic transosseous-equivalent double-row rotator cuff repair. *J Am Acad Orthop Surg*. 2019;27(24):e1093-e1101. doi:10.5435/JAAOS-D-18-00519
2. Johannsen AM, Arner JW, Erick BP, Nolte PC, Horan MP, Millett PJ. Minimum 10-year outcomes of primary arthroscopic transosseous-equivalent double row rotator cuff repairs. Presented at: 2020 ASES Fellows' Symposium (Virtual), June 20, 2020.
3. Smith MJ, Pfeiffer FM, Cook CR, Kuroki K, Cook JL. Rotator cuff healing using demineralized cancellous bone matrix sponge interposition compared to standard repair in preclinical canine model. *J Orthop Res*. 2018;36(3):906-912. doi:10.1002/jor.23680

## 5-Year Patient-Reported Outcomes of Anterior Cruciate Ligament Reconstruction Performed With Either Quadriceps, Hamstrings, or Bone–Patellar Tendon–Bone Autograft Tendon

### Purpose

To report 5-year clinical patient-reported outcomes of pain, function, level-of-activity, and quality-of-life for anterior cruciate ligament (ACL) reconstruction performed with either a quadriceps, hamstrings, or bone–patellar tendon–bone (BTB) autograft tendon technique.

### Methods

The inclusion criteria for this analysis were patients enrolled in the Surgical Outcomes System™ registry who underwent an ACL reconstruction performed using one of the following autograft tendons: quadriceps, hamstring, or patella (BTB). Standard patient-reported outcomes questionnaires for VAS, SANE knee, and Marx activity were administered at standard time points postoperatively. Results were reported from presurgery to 5 years postsurgery. The number of patients included per time point is shown to the right.

Time Point	No. of Compliant Patients ACL Reconstruction With Quad Tendon/ Total No. of Patients	No. of Compliant Patients ACL Reconstruction With Hamstring/Total No. of Patients	No. of Compliant Patients ACL Reconstruction With BTB/ Total No. of Patients
Presurgery	423/884	2007/4079	982/2305
3 months	513/840	2190/3945	1042/2229
6 months	451/793	1993/3817	884/2131
1 year	348/670	1851/3561	812/1959
2 years	204/437	1354/2735	676/1579
5 years	28/83	137/304	116/268

 Surgical Outcomes System

<https://surgicaloutcomesystem.com>



Scope This Out is an informational newsletter designed to educate orthopedic surgeons on new products, state-of-the-art surgical procedures, and “pearls” to assist in improving surgical skills.

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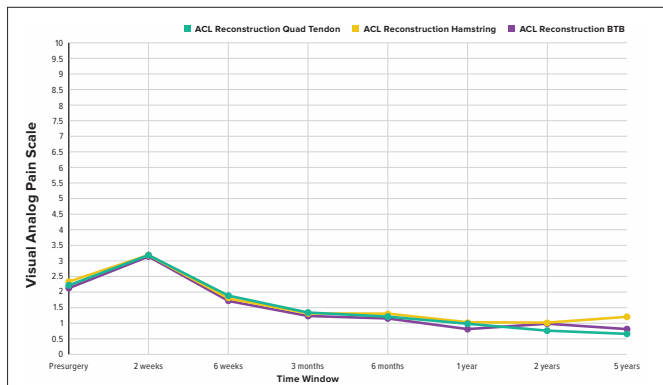


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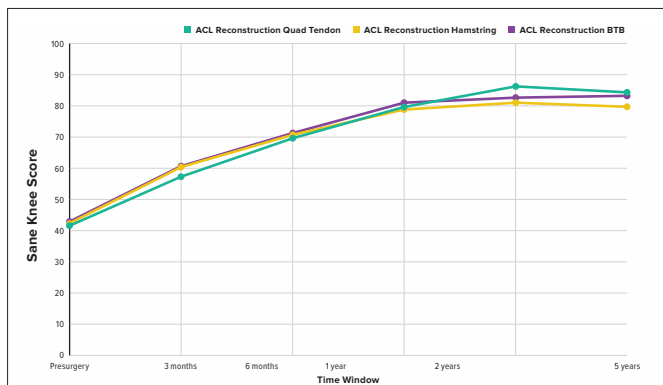
### Trend Conclusion

Based on these results, the pain, function, and quality-of-life scores trend toward favorable outcomes. However, no claims can be made on the potential of these results without further analysis to determine if there is statistical significance.

### Results



### VAS



### SANE



### MARX

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