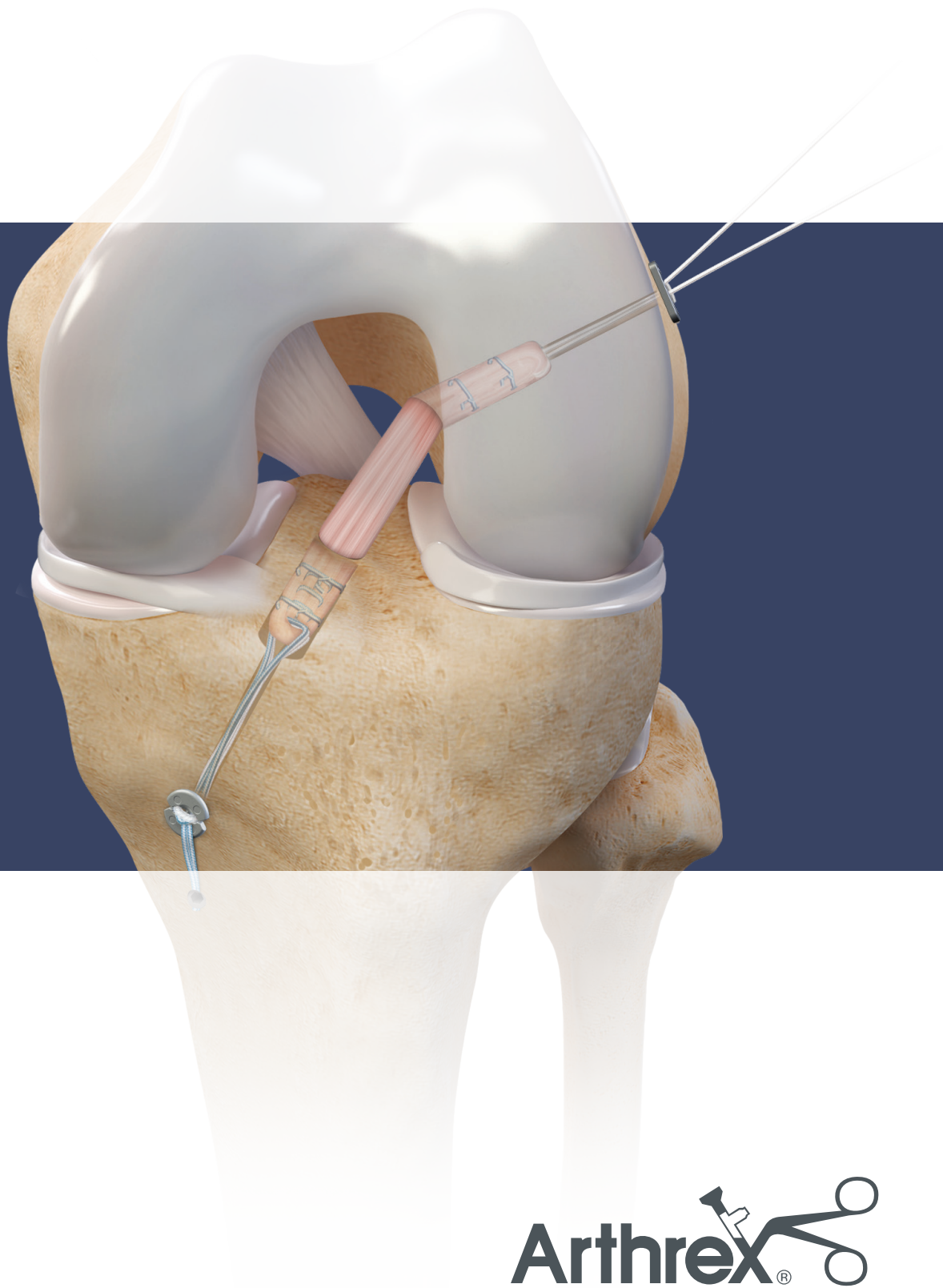


Allograft GraftLink[®] Construct

Surgical Technique



Arthrex[®] 

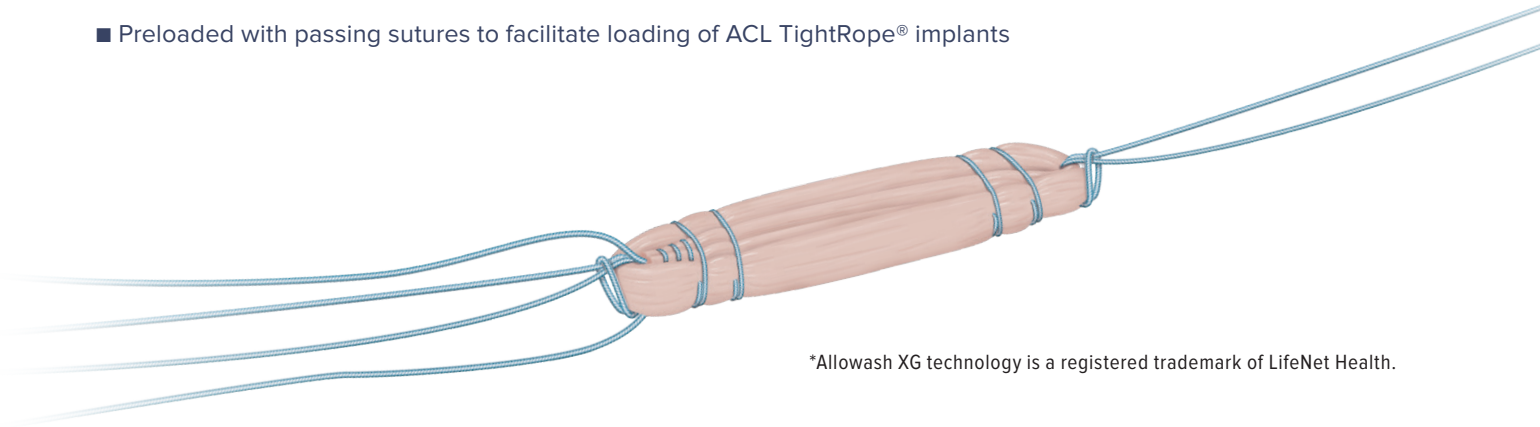
Introduction to Allograft GraftLink® Construct

The GraftLink construct is preconstructed allograft tendon designed to be used with the GraftLink ACL technique and TightRope® implants. Each construct precisely assembled according to Arthrex specifications by trained tissue technicians to ensure it meets the requirements of the GraftLink technique and allows for an anatomic, minimally invasive, and reproducible ACL reconstruction.

The constructs are provided sterile via LifeNet Health's Allowash XG technology* process. Allowash XG® technology is a patented and proprietary sterilization process that achieves a 10^{-6} sterility assurance level, a high degree of safety, without compromising biological and biomechanical properties. Since 1995, more than 6 million bioimplants processed using Allowash technology have been distributed with no disease transmission.¹

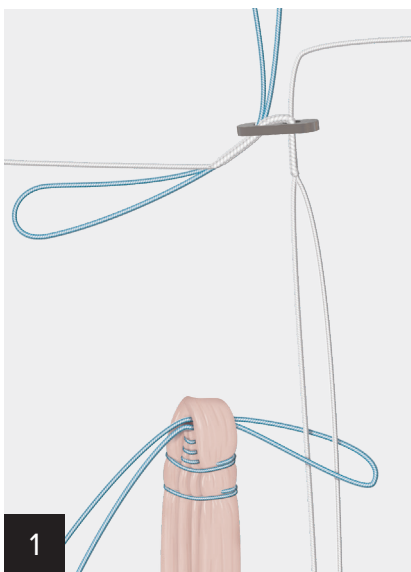
Allograft GraftLink® Construct Benefits

- Sterile with Allowash XG® technology
- Preassembled with #2 FiberWire® suture
- Minimal graft preparation time
- Presized to specifications of GraftLink all-inside ACL technique
- Preloaded with passing sutures to facilitate loading of ACL TightRope® implants

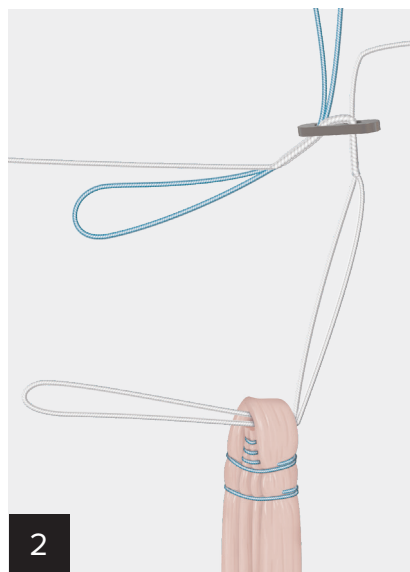


*Allowash XG technology is a registered trademark of LifeNet Health.

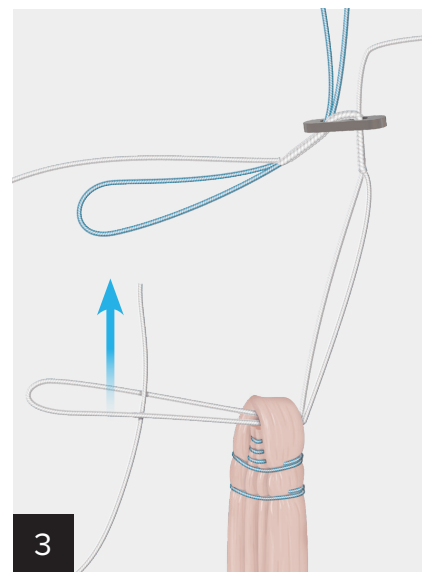
Loading of the Femoral Graft End With BTB TightRope Implant



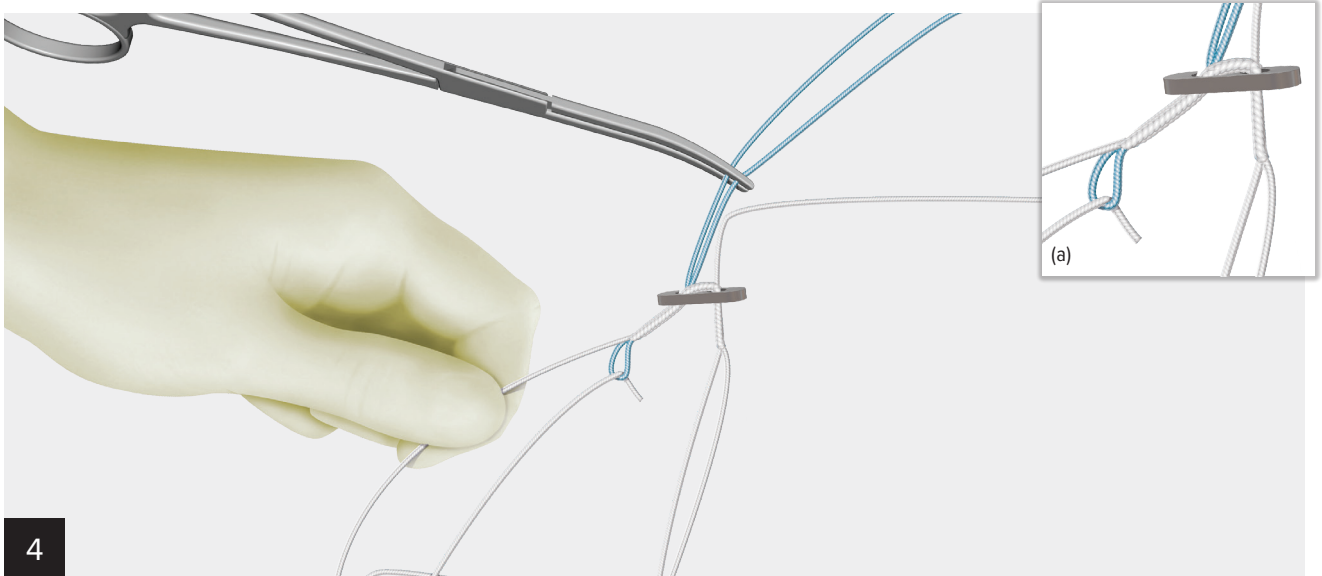
1 The BTB TightRope open-loop implant is used on the femoral side of the graft. Remove the needle from the BTB TightRope loop by cutting the Nitinol wire loop. Unfold the blue passing suture of the femoral end of the GraftLink construct, exposing a loop and 2 tails. Drop the loop of the BTB TightRope implant into the blue loop of the passing suture.



2 Pull the tails of the passing suture to pass the TightRope loop through the graft.

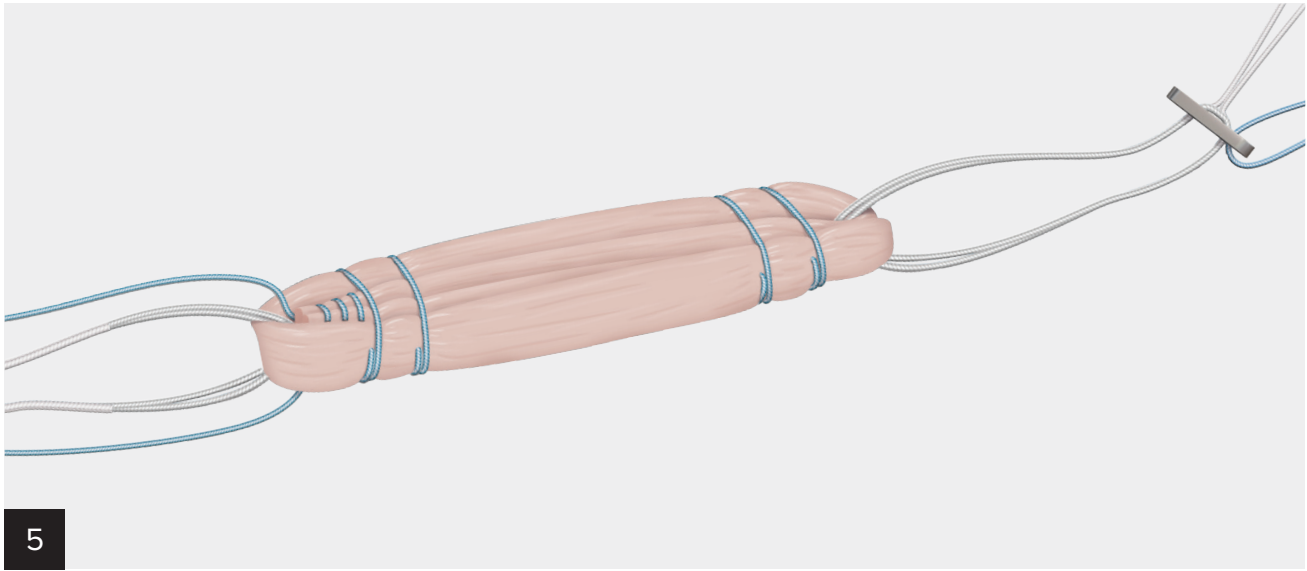


3 Pass the free end of the TightRope implant through the TightRope loop.



4

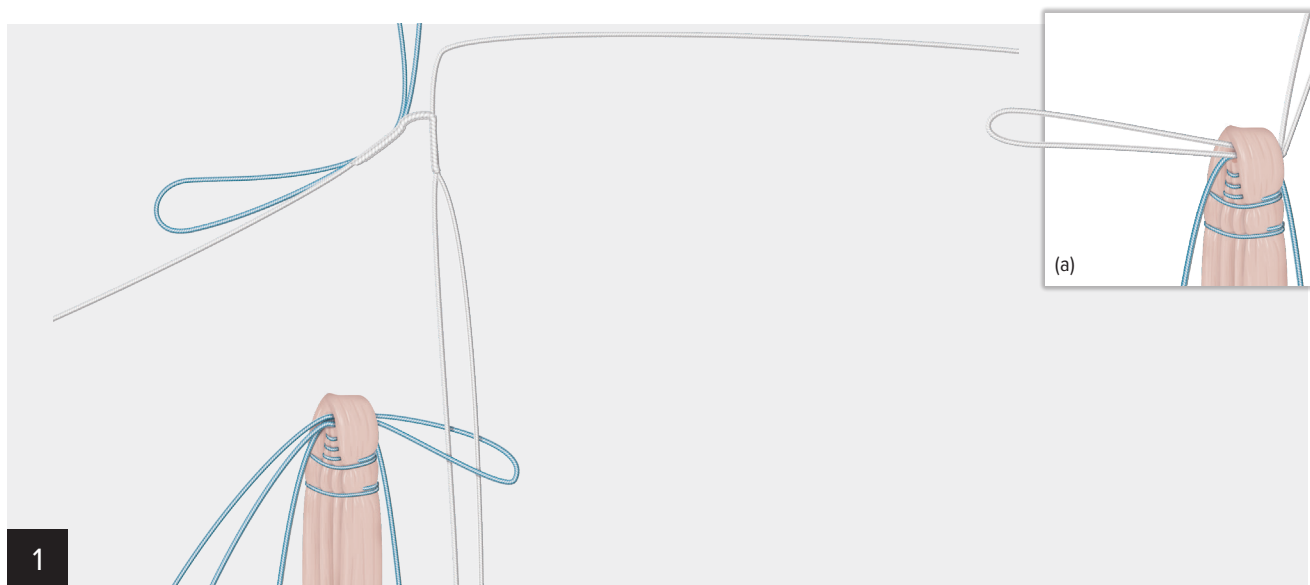
Pass about 2 cm of the free end of the implant through the blue passing suture. While holding the white suture in place, pull proximally on the tails of the blue passing loop until the free end is pinched against the splice of the implant (this will prevent disassembly during passing). Grip the fixed end of the suture (a) with the left hand. Using a clamp, pull proximally on the blue tails to pass the free end of the implant through the splice and through the TightRope® fixation button.



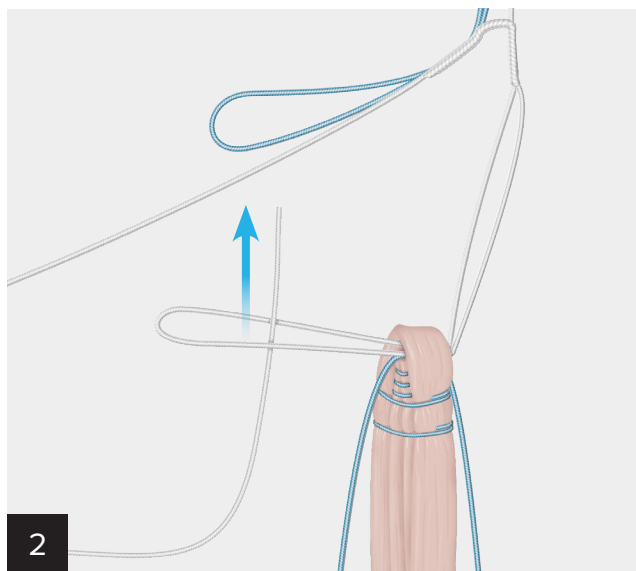
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Once passed, adjust the loop lengths so that they are equal with the loop connection near the apex of the graft.

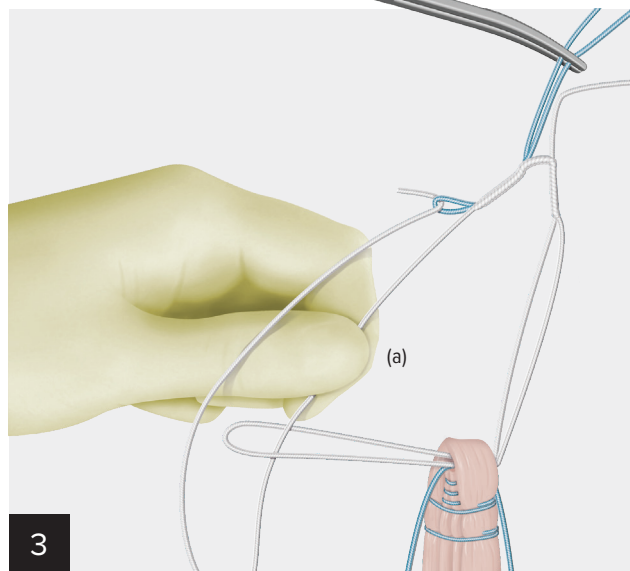
Loading of the Tibial Graft End With Open TightRope® ABS Implant



An open TightRope ABS (Attachable Button System) is used for tibial fixation and loaded onto the graft in similar fashion as the BTB TightRope implant. Unfold the blue passing suture of the tibial end of the GraftLink® construct, exposing a loop and 2 tails. Drop the loop of the TightRope implant into the blue loop of the passing suture. Pull the tails of the passing suture to pass the TightRope loop through the graft (a). **Note: Do not cut or remove the blue #2 FiberWire® sutures used to suture the tendon tails together. These should be used to assist with tensioning the graft, passing the graft into the tibial tendon, and as backup fixation.**

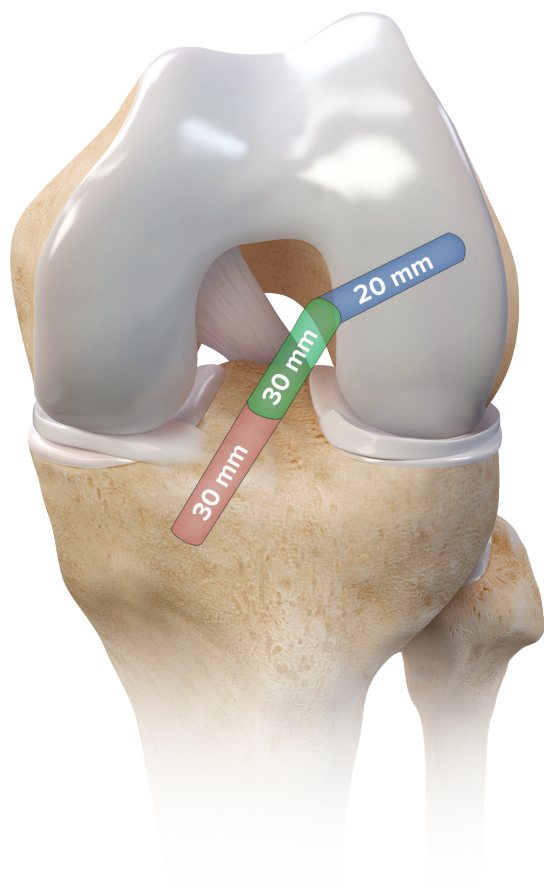


Pass the free end of the TightRope implant through the TightRope suture loop.



Pass about 2 cm of the free end of the implant through the blue passing suture. While holding the white suture in place, pull proximally on the tails of the blue passing loop until the free end is pinched against the splice of the implant (this will prevent disassembly during passing). Grip the fixed end of the suture with the left hand (a). Using a clamp, pull proximally on the blue tails to pass the free end of the implant through the splice.

Graft Sizing and Socket Creation



Arthrex graft tubes are ideal for sizing and compressing Allograft GraftLink® constructs. These full-length, clear tubes facilitate graft compression, sizing, and preparation.

Graft Sizing

Measure the graft length and diameter. Pass both the femoral and tibial ends of the graft into the sizing block to measure diameter for socket drilling.

Socket Creation

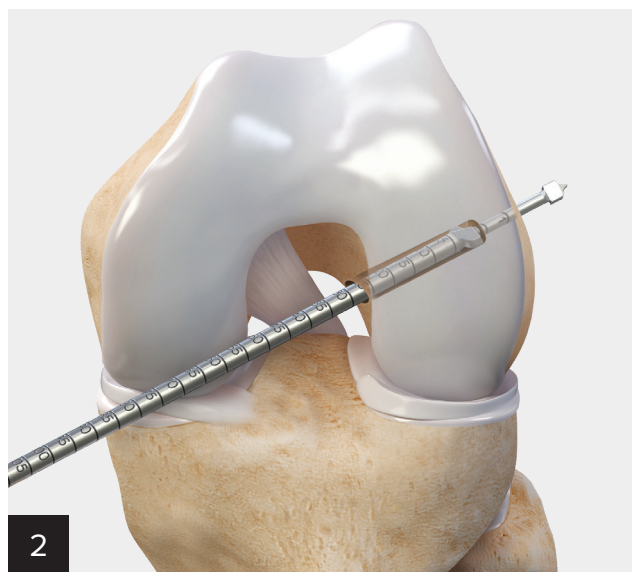
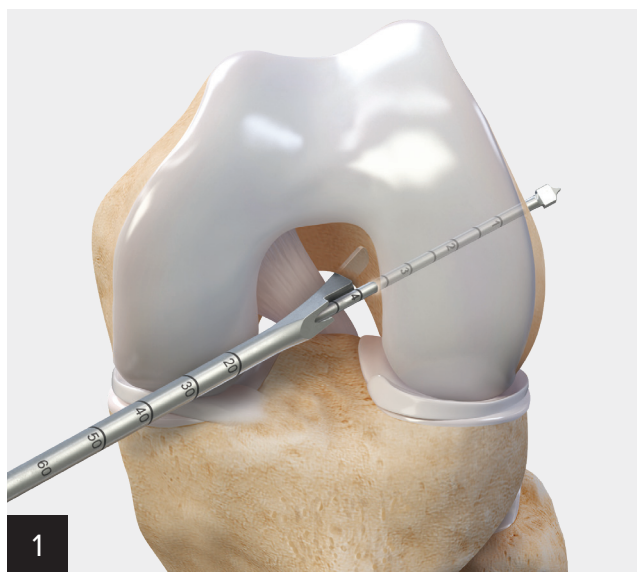
The length from the end of the femoral socket to the end of the tibial socket should be at least 10 mm longer than the graft to ensure the graft can be tensioned fully.

Example: 70 mm Length



Femoral Socket Creation (Medial Portal Option)

The femoral socket should be created either through the medial portal or from outside/in, using a FlipCutter® III drill.

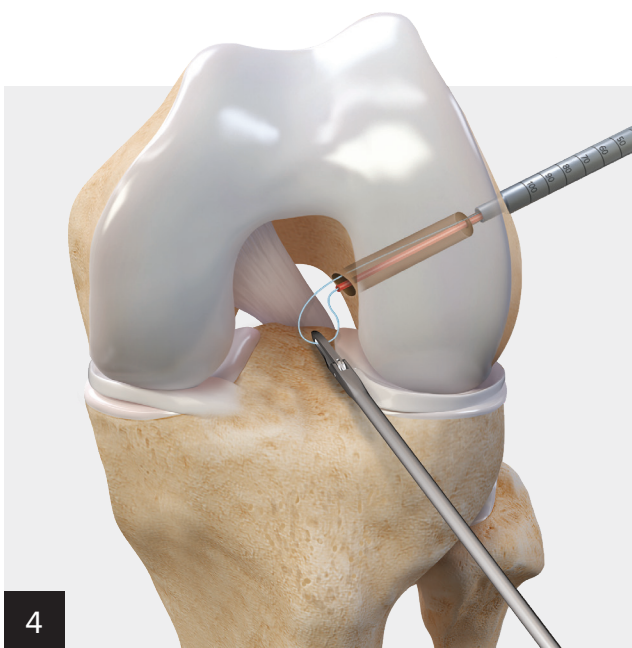


For medial portal drilling, use the TightRope® drill pin, transportal ACL guides, and low-profile reamers. **Note the intraosseous length from the TightRope drill pin.** After socket drilling, pass a suture with the TightRope drill pin for subsequent graft passing.



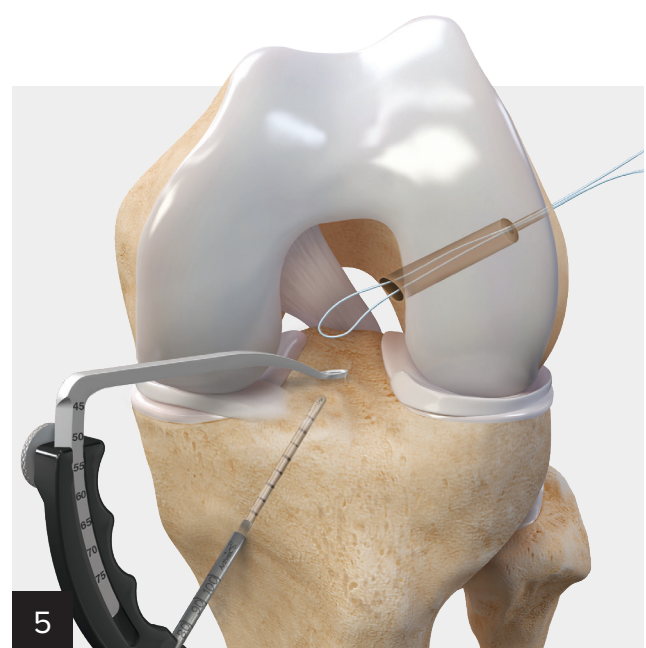
3

The FlipCutter® III drill may also be used to create the femoral socket. Place the guide into the joint and push the drill sleeve down to bone. **Note the femoral measurement where the drill sleeve meets the guide (a).** Drill into the joint, remove the guide, and tap the stepped drill sleeve into bone. Flip the blade on the FlipCutter III drill and ream until the desired socket depth is reached, as measured using the FlipCutter drill markings (b).



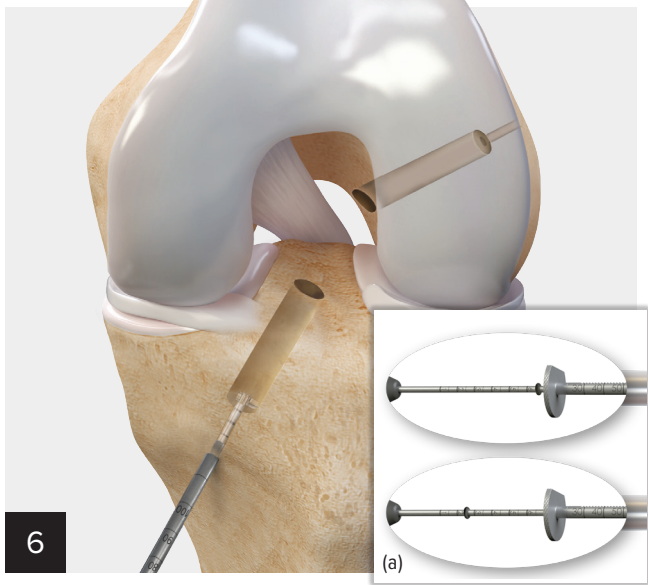
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After “flipcutting,” pass a FiberStick™ suture through the stepped drill sleeve and dock for subsequent graft passing.

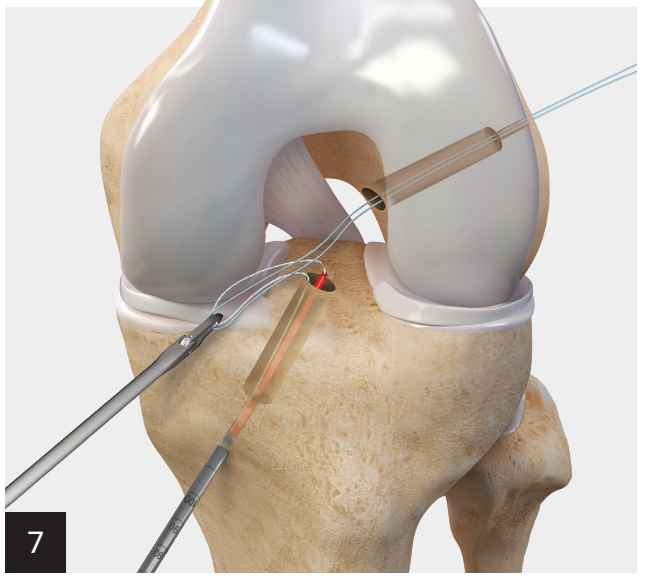


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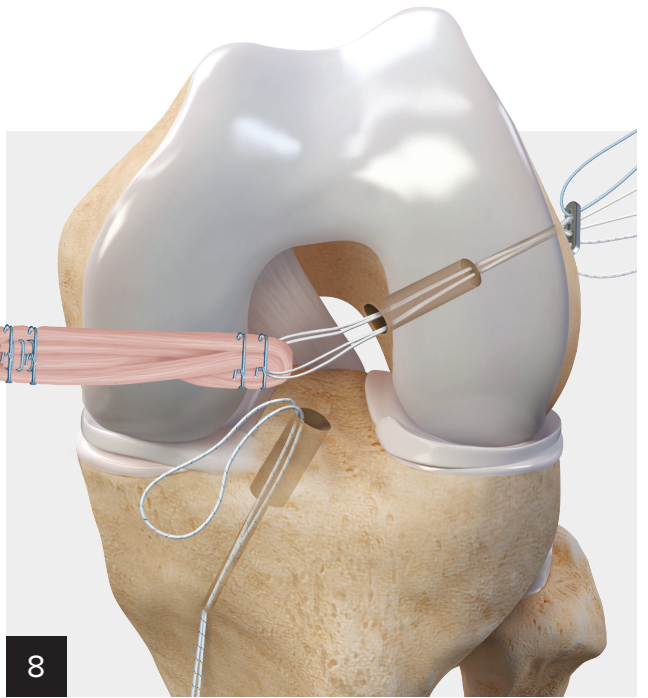
For tibial socket preparation, use the ACL tibial marking hook to drill the FlipCutter III drill into the joint. Then remove the marking hook, leaving the stepped drill sleeve in place.



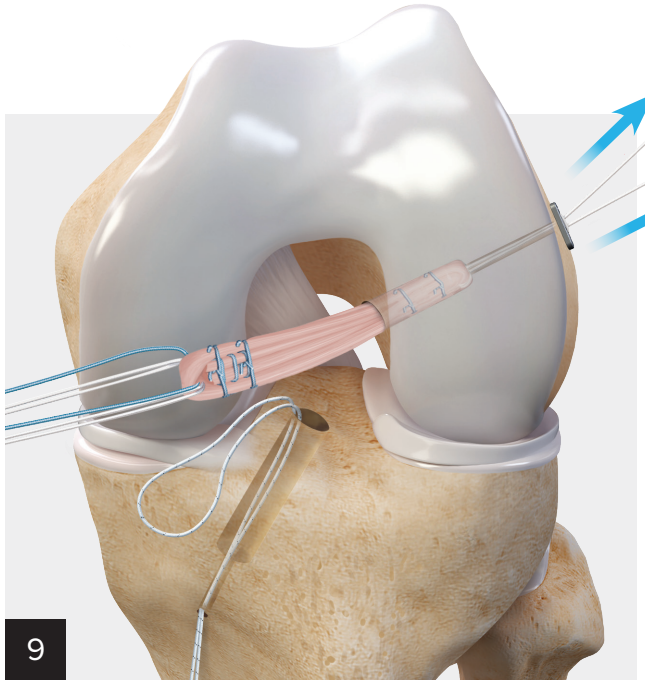
6 Tap in the stepped drill guide sleeve and flip the FlipCutter® III drill blade, locking it into cutting position. Drill on forward, with traction, to cut the socket. Use the rubber grommet and 5 mm markings on the drill to measure socket depth (a).



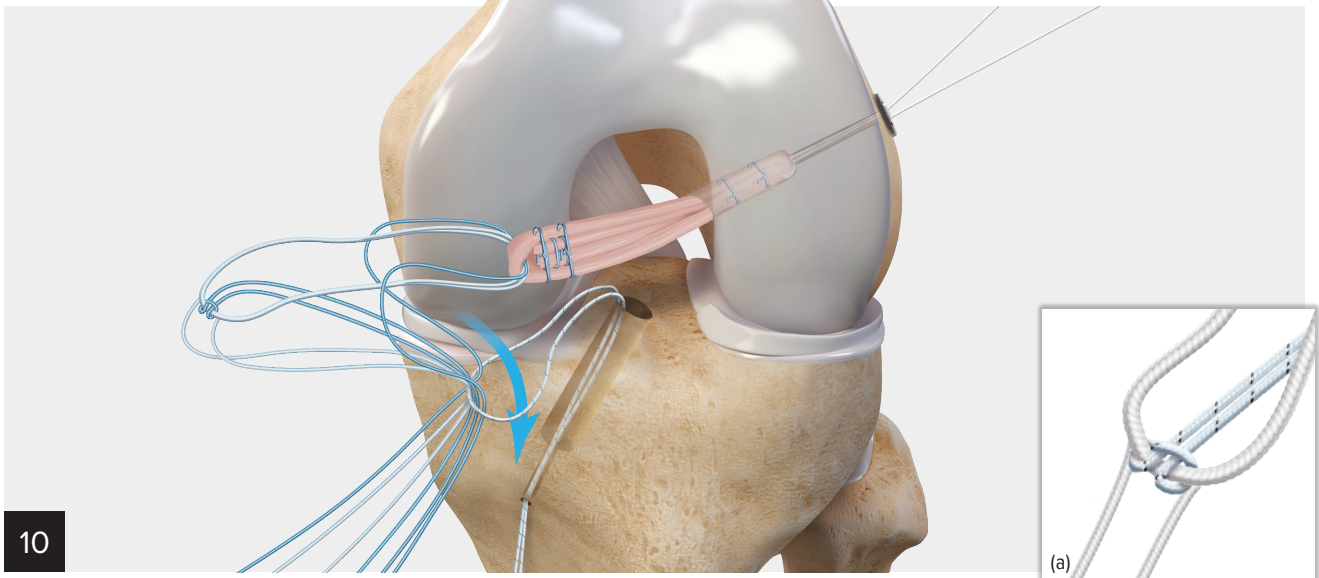
7 Straighten the FlipCutter III drill's blade and remove it from the joint. Pass a TigerStick® suture passer into the joint and retrieve the tibial TigerStick and femoral FiberStick™ sutures together from the medial portal with a suture retriever. Retrieving both sutures at the same time will help avoid tissue interposition that can complicate graft passing. **Note: A PassPort Button™ cannula may also be used in the medial portal to prevent tangling of sutures.**



8 Pass the blue FiberWire® passing suture, the TigerWire® flipping suture, and the TightRope® shortening strands through the femur. Remove slack from the sutures and ensure equal tension. Clamp or hold both blue and white sutures and pull them together to advance the button out of the femur. Pull back on the graft to confirm the button is seated. **Note: The femoral length may be marked on the TightRope loop to signal when the button has exited the femur.**

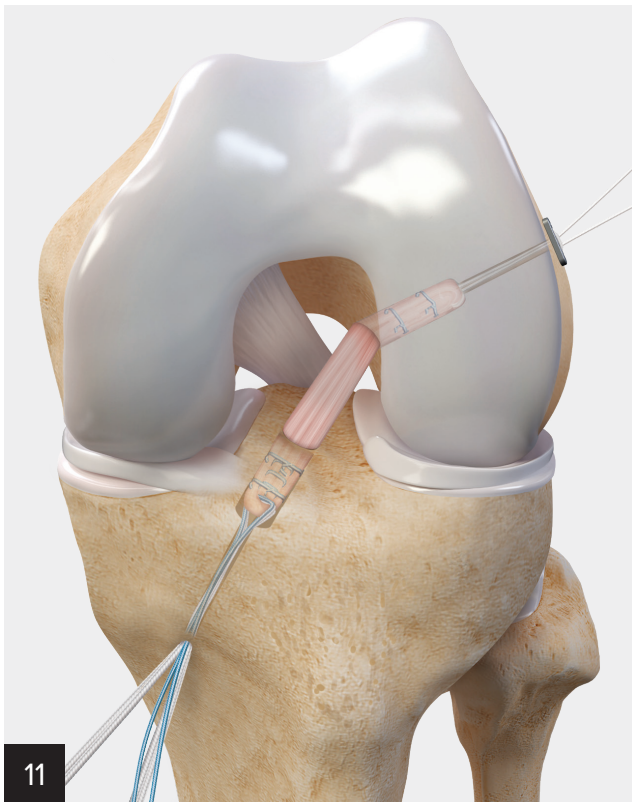


9 While holding slight tension on the graft, pull the shortening strands proximally, one at a time to advance the graft. Pull on each strand in 2 cm increments. **Note: The graft can be fully seated into the femur or left partially inserted until tibial passing is complete. The latter option allows fine-tuning of graft depth in each socket.**



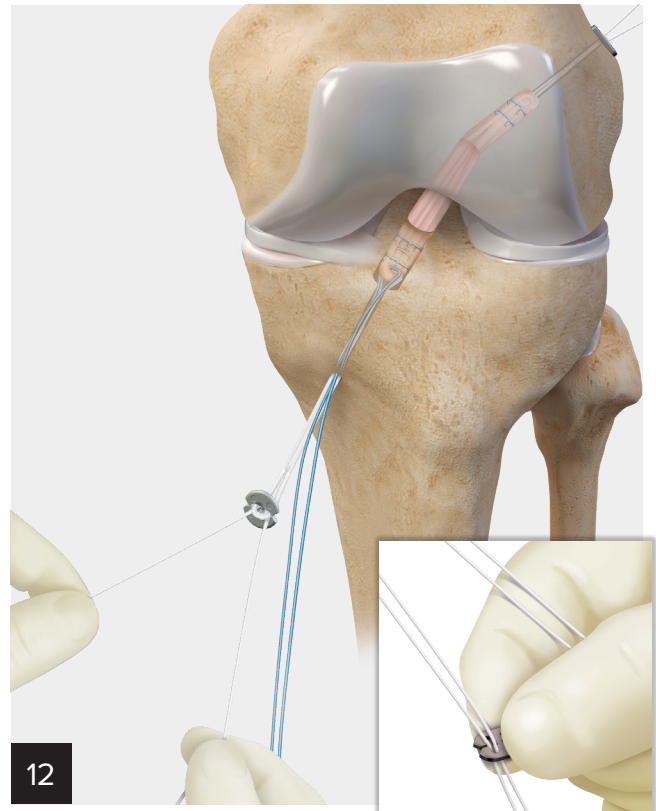
10

Cinch a suture around the end of the TightRope ABS loop to use for passing (a). Load the cinch suture and the whipstitch tails from the graft into the tibial passing suture. Pull on the tibial passing suture to transfer the TightRope ABS loop and whipstitch sutures out of the tibia distally.



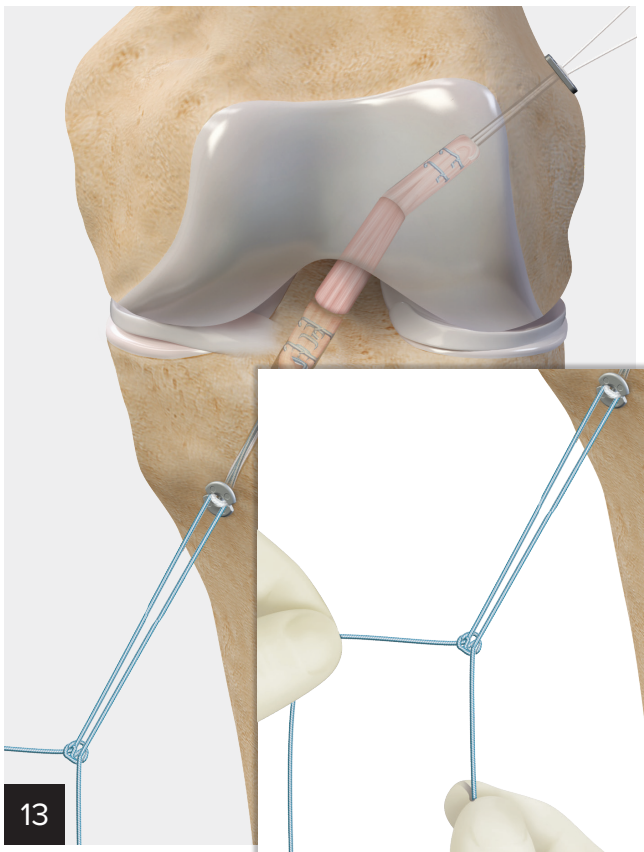
11

Advance the graft into the tibia by pulling on the inside of the TightRope® ABS loop and whipstitch sutures.



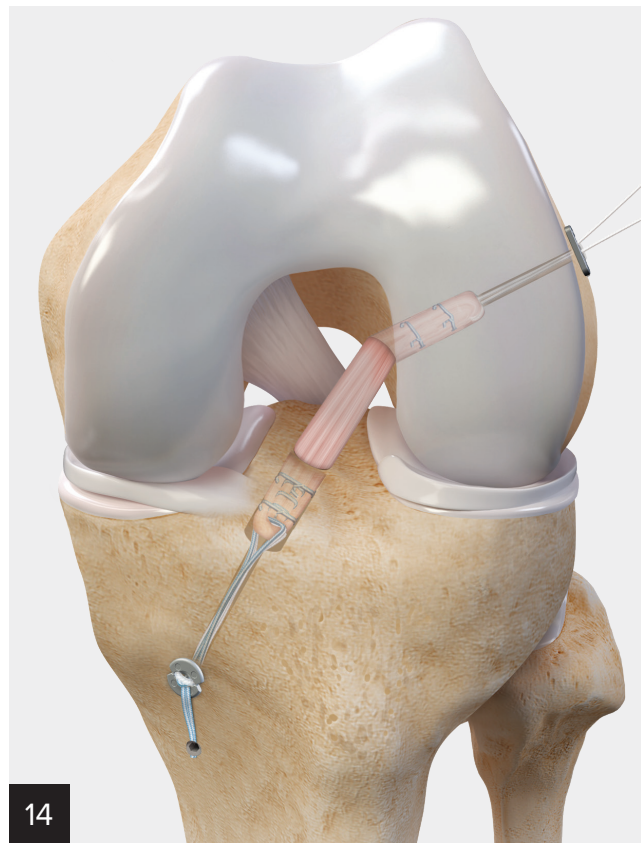
12

Load the TightRope ABS button onto the loop. Pull on the white shortening strands to advance the button to bone and tension the graft. **Note: Ensure that the button has a clear path to bone, as to not entrap soft tissue under the button.**



13

Load the whipstitch sutures into the button and tie a knot for backup fixation. Alternatively, backup sutures may be fixated to the tibia using the SwiveLock® anchor ACL backup kit.

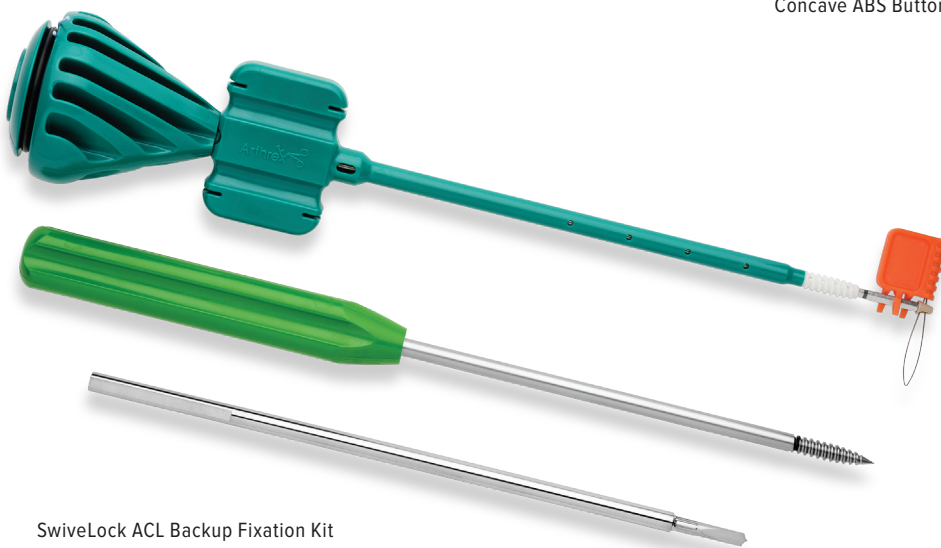


14

Final fixation.



Concave ABS Buttons



SwiveLock ACL Backup Fixation Kit

Ordering Information

Implants

Product Description	Item Number
Allograft GraftLink® Construct/Allograft GraftLink TS Construct	FGL/FGLTS
TightRope® BTB Implant	AR-1588TB
Open TightRope ABS Button	AR-1588TN-1
TightRope ABS Button	AR-1588TB
TightRope ABS Button, 14 mm round	AR-1588TB-1
Concave ABS Button, 11 mm w/ 4 mm collar	AR-1588TB-3
Concave ABS Button, 14 mm w/ 7 mm collar	AR-1588TB-4
Concave ABS Button, 20 mm w/ 9 mm collar	AR-1588TB-5

Convenience Pack

Product Description	Item Number
Allograft GraftLink Convenience Pack (includes implants, suture, and disposables for GraftLink technique)	AR-1588AL-CP
SwiveLock® Anchor, Backup ACL Fixation Kit	AR-1593

Instruments

Product Description	Item Number
For FlipCutter® Drill Technique	
RetroConstruction™ Drill Guide Set	AR-1510S
Footprint Femoral ACL Guide, right	AR-1510FR
Footprint Femoral ACL Guide, left	AR-1510FL
Short FlipCutter II Drills, 5 mm-13 mm	AR-1204AS-50 – 130
FlipCutter III Drill, 6 mm-12 mm	AR-1204FF-60 – 120
For Medial Portal Technique	
Transportal ACL Guides (TPGs), 4 mm-8 mm	AR-1800-04 – 08
Low-profile Reamers, 5 mm-13 mm (0.5 mm increments)	AR-1405LP – 1413LP
TightRope Drill Pin, open	AR-1595T
TightRope Drill Pin, closed	AR-1595TC

Accessories

Product Description	Item Number
Suture Retriever	AR-12540
Suture Cutter for ACL TightRope Suture	AR-4520
Graft Sizing Block	AR-1886

GraftPro® Graft Preparation System (AR-2950DS)

Product Description	Item Number
GraftPro Board	AR-2950D
GraftPro Posts	AR-2950AP
GraftPro Case	AR-2950DC
GraftPro GraftLink Tensioner	AR-2950GT
GraftPro GraftLink Holder	AR-2950GH
GraftPro Button Holder	AR-2950BH
GraftPro Soft Tissue Clamp	AR-2950SC

Suture

Product Description	Item Number
FiberStick™ Suture, #2 FiberWire® Suture, 50 in (blue), one end stiffened	AR-7209
TigerStick® Suture, #2 TigerWire® Suture, 50 in (white/black), one end stiffened	AR-7209T

Products may not be available in all markets because product availability is subject to the regulatory approvals and medical practices in individual markets. Please contact Arthrex if you have questions about the availability of products in your area.

Reference

1. LifeNet Health. Frequently asked questions. <https://www.lifenethealth.org/sites/default/files/files/68-30-007.pdf>. Accessed January 17, 2020.



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.

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