

# + Instability excellence

Redefining peak performance

**Smith+Nephew**



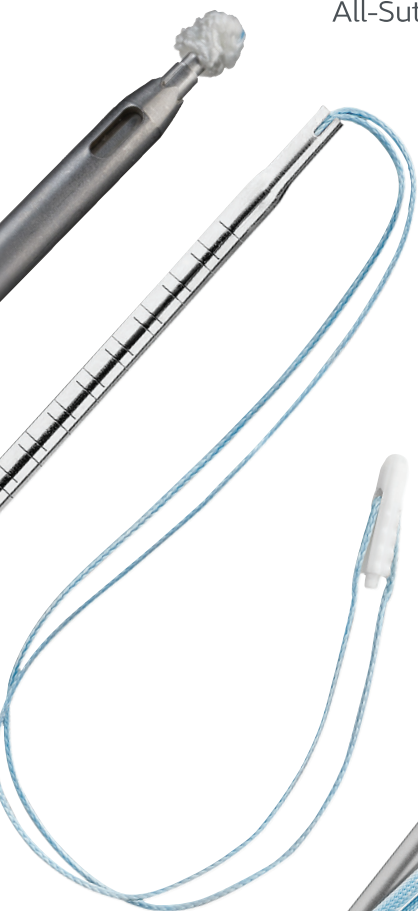
# Redefining peak performance

Elevate your expertise for shoulder instability repairs. With solutions ranging from simple to complex, Smith+Nephew's Instability Excellence portfolio is setting new standards to take you to the next level while returning your patients to peak performance.

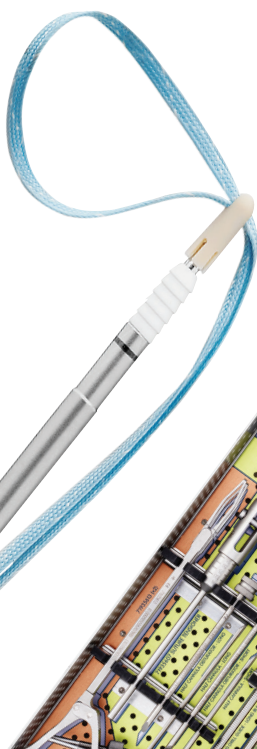
No matter the repair, the procedure or the pathology, Smith+Nephew's Instability Excellence portfolio has you covered. Regardless of the complexity, you'll find solutions around the entirety of the glenoid including; soft tissue repairs, boney Bankart repairs and glenoid bone loss.

## Our Instability Excellence portfolio includes:

**Q-FIX**   
All-Suture Anchor

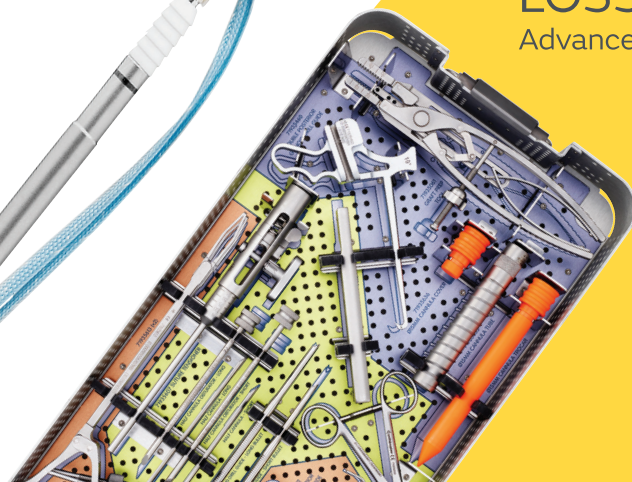


**MICRORAPTOR**   
**REGENESORB**   
Suture Anchor



**MICRORAPTOR**  
**KNOTLESS**  
Suture Anchor

**GLENOID BONE  
LOSS SYSTEMS**  
Advanced Instability Solutions



Our total package of evidence-backed solutions coupled with an extensive medical education program is redefining peak performance so together, we can redefine shoulder repair.



# Soft tissue and boney Bankart repairs

## Q-FIX<sup>®</sup> Suture Anchor

### Consistent deployment<sup>1-3</sup>

The active deployment against the inserter shaft and the tensioning of the sutures to at least 140N contributes to the low displacement during cyclic loading<sup>\*4-8</sup>

### Fixation strength

Shown to provide greater fixation strength when compared to other commercially available all-suture anchors<sup>\*\*5,6</sup>

\* As demonstrated in benchtop testing

\*\* As demonstrated in benchtop testing;(1.8mm) Compared to Zimmer Biomet JuggerKnot™ 1.45 (#1 and #2), Conmed Y-Knot™ Flex 1.3 and Stryker Iconix 1



Improve access to challenging shoulder anatomy with the Q-FIX Curved Drill Guide, complete with intuitive visual and tactile cues.<sup>9</sup>

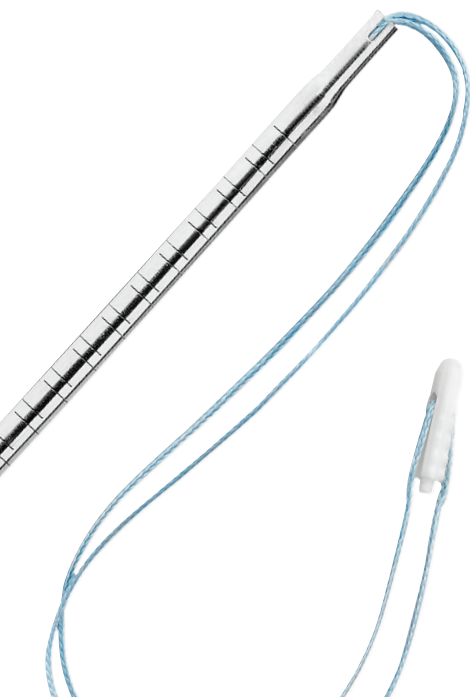
## MICRORAPTOR<sup>®</sup> REGENESORB<sup>®</sup> Suture Anchor

### Compact size

The MICRORAPTOR REGENESORB Suture Anchor's small diameter (2mm area) and short pilot hole depth (14.8mm) allows you to place multiple anchors for increased points of fixation around the acetabulum or glenoid, contributing to a secure repair.

### Fixation strength

An innovative, rectangular anchor that tapers towards the distal tip to increase points of fixation.



## MICRORAPTOR KNOTLESS Suture Anchor

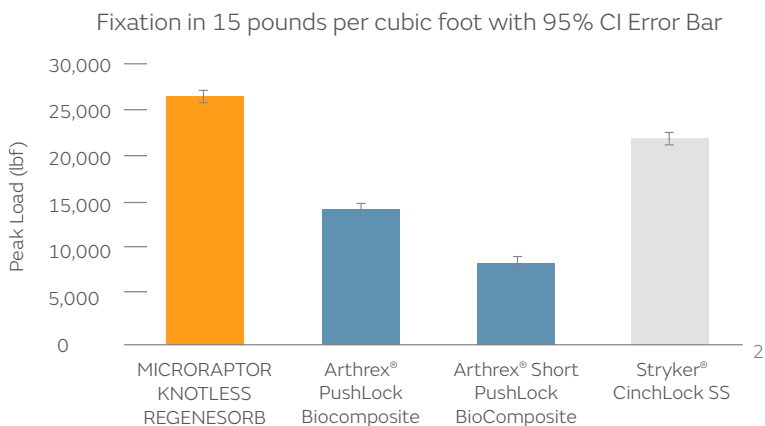
### Off-axis insertion

With a full-length inserter and a rigid implant design, gain increased access to challenging areas<sup>10</sup> with a greater improved off-axis insertion performance\*<sup>11</sup>

\* As demonstrated in benchtop testing, compared to Arthrex PushLock™ BioComposite 2.9 mm. Based on REGENESORB® variant.

### Fixation strength

On average, MICRORAPTOR KNOTLESS Suture Anchor provides significantly ( $p < 0.001$ ) greater fixation<sup>12</sup>



### MINITAPE Suture

#### A smooth suture tape

Low profile and designed to evenly distribute pressure.

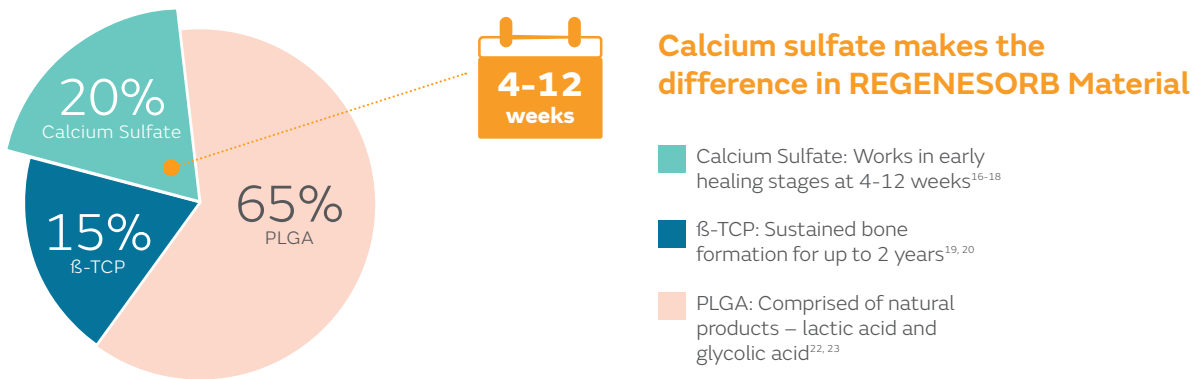


- 71% higher anchor fixation strength than Arthrex® Short PushLock BioComposite
- 47% higher anchor fixation strength than Arthrex® PushLock BioComposite
- 21% higher anchor fixation strength than Stryker® CinchLock SS knotless anchor

# REGENESORB<sup>◇</sup> Material

**No other biocomposite can do this. A unique formulation of proven materials.**

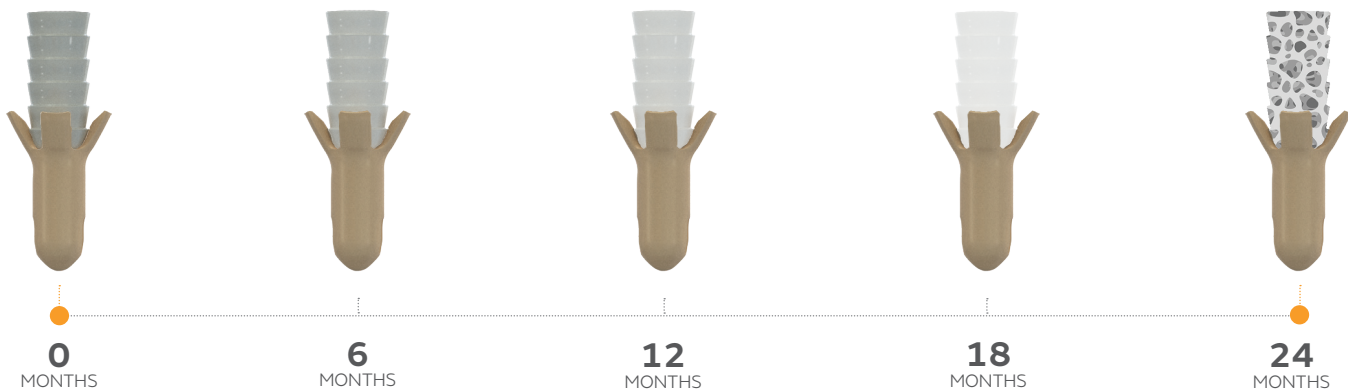
REGENESORB material is designed to provide a jump start in bone healing and formation.



## Absorption and bone replacement

### Timeline of implant

REGENESORB material is designed to remain mechanically stable for a minimum of six months\*\* before being absorbed and effectively replaced by bone within 24 months. <sup>\*13-15,23,24</sup>



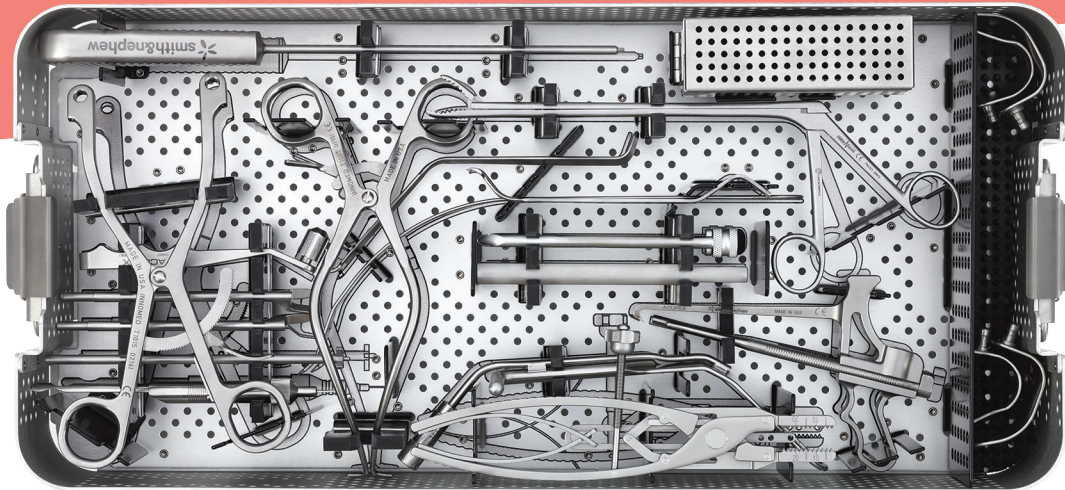
\* Demonstrated clinically and in vivo

\*\* As demonstrated in vitro

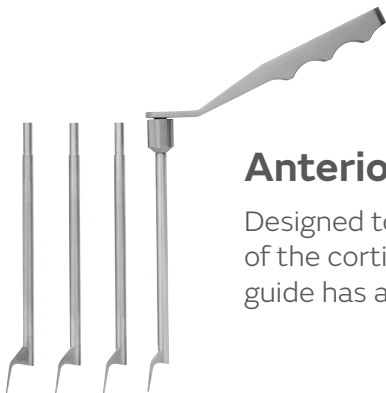


# Glenoid Bone Loss

Reach a new level with our comprehensive Glenoid Bone Loss System. A system designed to be accurate, reproducible and efficient every step of the way, leading to an optimized bone graft placement.

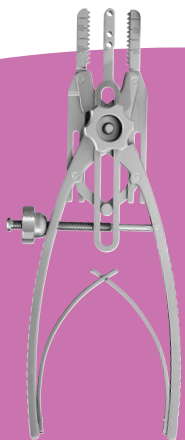
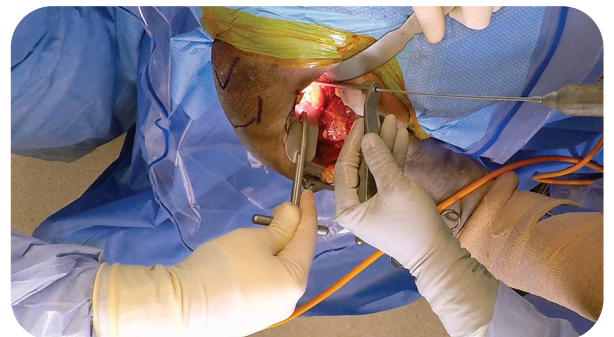


MiniOpen Latarjet and Bone Block Tray



## Anterior glenoid drill guide

Designed to help minimize the breaching of the cortical surface, the anterior drill guide has a 10-degree divergent angle.

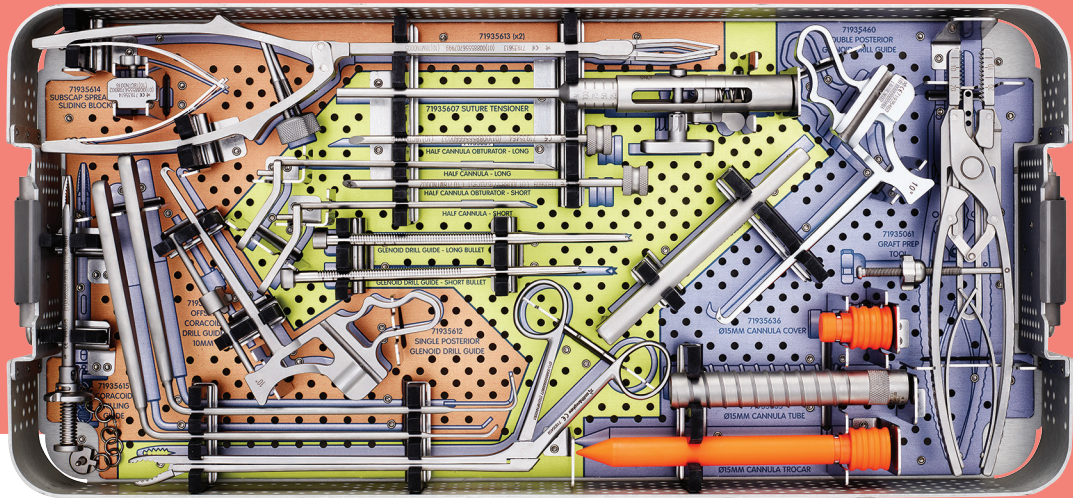


## Graft preparation tool

The Coracoid Prep Tool provides the ability to securely hold, fully prepare and accurately drill the bone graft with one instrument.







Arthroscopic Latarjet and Bone Block Tray

## Double ENDOBUTTON<sup>®</sup> Fixation Device

### A new type of fixation...

- Demonstrated healing rates of over 90% in patients with shoulder instability<sup>25-30</sup>
- Shown to be biomechanically equivalent to screw fixation<sup>\*31</sup>
- Reduced procedure complications due to hardware, when compared to standard screw fixation<sup>\*\*32</sup>
- In a study of patients with chronic recurrent anterior gleno-humeral instability, 82.1% returned to sport at the preinjury level<sup>\*\*\*28</sup>

\*As demonstrated in the Latarjet-Bristow procedure

\*\*n=27 vs 115 screws

\*\*\*n=28

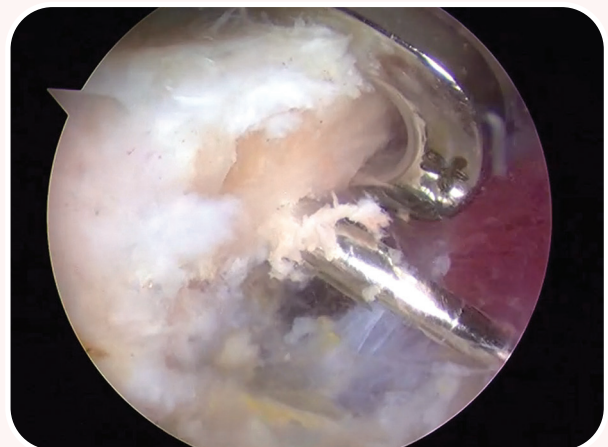
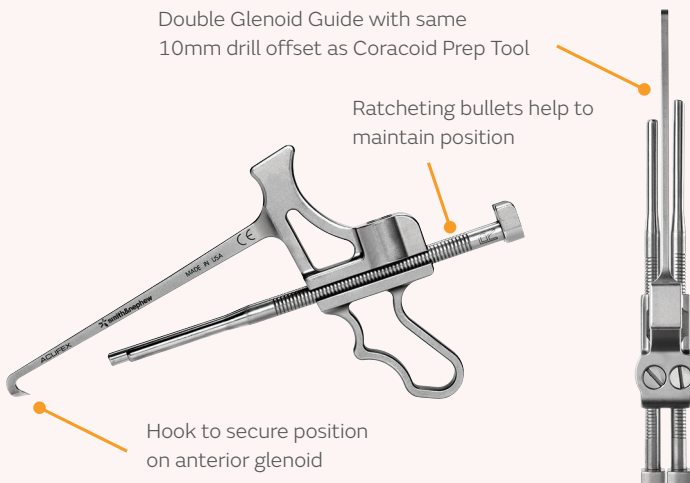


## Posterior Glenoid Drill Guide

Double Glenoid Guide with same 10mm drill offset as Coracoid Prep Tool

Ratcheting bullets help to maintain position

Hook to secure position on anterior glenoid



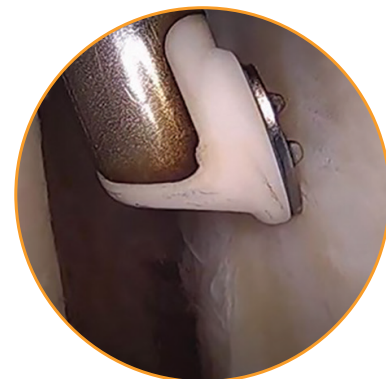
# Arthroscopic Enabling Technology

## FLOW 90° COBLATION° Wand

- Significantly faster ablation rate than other frequently used 90-degree arthroscopy wands<sup>\*37</sup>
- Significantly more efficient at ablation than other frequently used 90-degree arthroscopy wands<sup>\*\*37</sup>

\*As demonstrated in vitro when tested at default settings;  $p < 0.05$

\*\*As demonstrated in vitro when tested at default settings;  $p < 0.01$



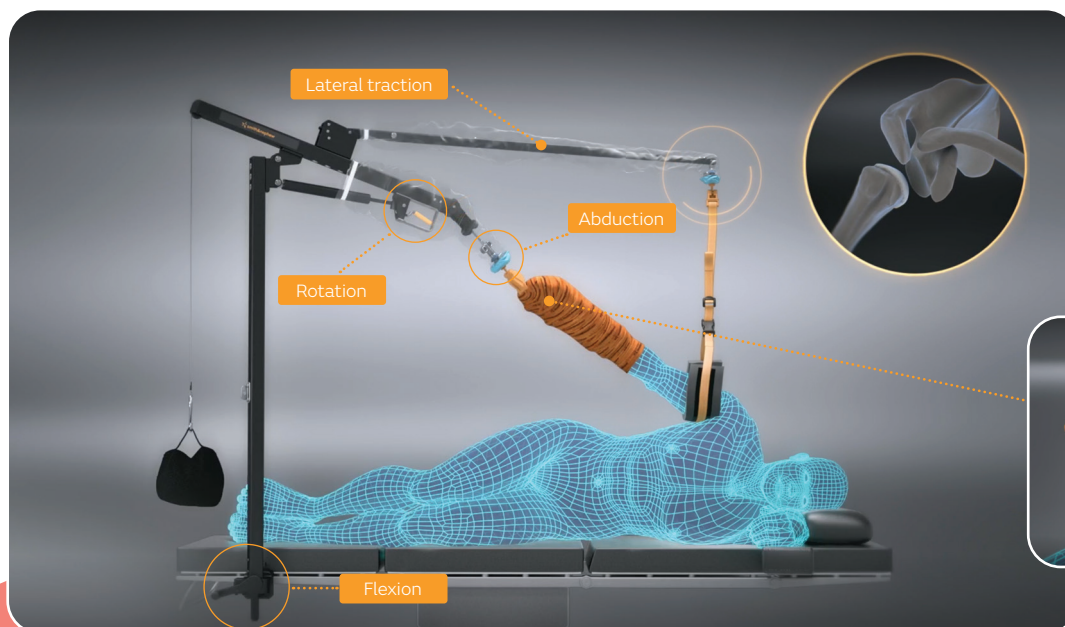
## DYONICS° PLATINUM FLYER° Shaver Blade

- Minimizes potential for damage to surrounding tissues during insertion and removal<sup>\*38</sup>

\*n=8

## ACUFEX° ACCESS Positioning System

- Lateral decubitus positioning made easy<sup>33</sup>
- Designed with ease of use in mind, this lightweight<sup>34</sup> and stable solution<sup>35,36</sup> gives you unimpeded access to the repair site.<sup>33-35</sup>



# Suture Passing

## ACCU-PASS<sup>®</sup> Disposable Suture Shuttles

Controlled with a simple thumb wheel for one-handed operation; available in eight different tip configurations.

- Options provide flexibility in both procedure and technique
- Solid one-piece shaft designed to resist bending and breakage
- Sterile, single patient use
- Suture passing and shuttling for instability, plications and side to side repairs



## FIRSTPASS<sup>®</sup> MINI Family of Suture Passers

With the goal of providing a reliable, versatile and easy-to-use system, these suture passers are designed to help facilitate procedures executed in tight spaces.

- Reliability through a fully-disposable system with a preloaded needle<sup>39-42</sup>
- Versatility to pass #2 ULTRABRAID<sup>®</sup> Suture or ULTRATAPE<sup>®</sup> Suture
- Accessibility through straight and 17-degree left and right curved jaw options



# Ordering information

Q-FIX <sup>®</sup> All-Suture Anchor	
Reference #	Description
<b>1.8mm Q-FIX and 1.8mm Q-FIX All-Suture Anchors</b>	
72290123	1.8mm Q-FIX MINI All-Suture Anchor
25-1800	1.8mm Q-FIX All-Suture Anchor
<b>Disposable Kits</b>	
Reference #	Description
72290125	1.8mm Q-FIX MINI Kit, disposable
72290126	1.8mm Q-FIX MINI Kit XL, disposable
25-1810	1.8mm Q-FIX Kit, disposable
25-1811	1.8mm Q-FIX Kit XL, disposable
<b>Reusable Instruments</b>	
Reference #	Description
72290032	1.8mm Q-FIX Drill Guide, reusable
72290034	1.8mm Q-FIX Drill Guide XL, reusable
72290120	1.8mm Q-FIX Curved Drill Guide, reusable
72290119	1.8mm Q-FIX Curved Drill Guide XL, reusable
72290033	1.8mm Q-FIX Obturator, reusable
25-1812	1.8mm Q-FIX PATHFINDER Obturator, reusable
<b>Disposable Accessories</b>	
Reference #	Description
722900124	1.8mm Q-FIX MINI Straight Drill, disposable
72290030	1.8mm Q-FIX Straight Drill, disposable
72290118	1.8mm Q-FIX Flexible Drill, disposable
<b>MICRORAPTOR<sup>®</sup> REGENESORB<sup>®</sup> Suture anchor and Compatible Devices</b>	
Reference #	Description
<b>Suture Anchors</b>	
72204983	MICRORAPTOR REGENESORB Suture Anchor with ONE ULTRABRAID <sup>®</sup> #1 Suture (Blue)
72204984	MICRORAPTOR REGENESORB Suture Anchor with ONE ULTRABRAID #1 Suture (Blue COBRAID)

Drill Guides, Drills and Obturators	
Reference #	Description
72204988	MICRORAPTOR Drill
72205267	MICRORAPTOR Hard Bone Drill, 1.8mm
72204991	MICRORAPTOR Drill Guide, Crown Tip
72204992	MICRORAPTOR Drill Guide, Spike Tip
72204993	MICRORAPTOR Drill Guide, Crown Tip, Curved
72204995	MICRORAPTOR Drill Guide, Fishmouth Tip
72204999	MICRORAPTOR Obturator, Blunt Tip
72205000	MICRORAPTOR Obturator, Blunt Tip, Cannulated
72205001	MICRORAPTOR Obturator, Trocar Tip
<b>MICRORAPTOR KNOTLESS Suture Anchor and Compatibility System</b>	
Reference #	Description
<b>Implants</b>	
72205020	MICRORAPTOR KNOTLESS REGENESORB Suture Anchor
72205021	MICRORAPTOR KNOTLESS Peek Suture Anchor
<b>Drill Guides, Drills and Obturators</b>	
Reference #	Description
72204991	MICRORAPTOR Drill Guide, Crown Tip
72204992	MICRORAPTOR Drill Guide, Spike Tip
72204995	MICRORAPTOR Drill Guide, Fishmouth Tip
72205022	MICRORAPTOR KNOTLESS Drill, 2.2mm
72205169	MICRORAPTOR KNOTLESS Drill, 2.6mm
72204999	MICRORAPTOR Obturator, Blunt Tip
72205000	MICRORAPTOR Obturator, Blunt Tip, Cannulated
72205001	MICRORAPTOR Obturator, Trocar Tip
<b>MINITAPE</b>	
Reference #	Description
72205129	MINITAPE COBRAID White
72205128	MINITAPE COBRAID Blue
72205127	MINITAPE Blue

## Ordering information (cont.)

### Glenoid Bone Loss

Reference #	Description
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#### Glenoid Bone Loss Instrument Sets

7193R001	MiniOpen Latarjet Instruments
7193R002	MiniOpen + Arthroscopically Assisted Latarjet Instruments
7193R003	Arthroscopic Latarjet + Bone Block Instruments
7193R004	Arthroscopic Latarjet Instruments
7193R005	Arthroscopic Bone Block Instruments

#### Glenoid Bone Loss Consumables

Reference #	Description
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71934993	RND ENDBTN POST SST W-SZ3/4 SUTURE LOOP
71934989	RND ENDBTN 1-HOLE SST FOR SZ3/4 STRE LP
71934990	ROUND ENDOBUTTON 2-HOLE SS
014771	T-FIX <sup>®</sup> RCG STERILE PAC (2.8 mm Drill with Sleeve)
71933035	2.7MM DRL BIT W/QCK CNCT STD TIP
71935042	Reciprocating Saw Blade
71935043	STRAIGHT CUT RASP (Reciprocating)
013593	SUTURE RETRIEVER (BOX 6)
72201361	ACCU-PASS SUT SHUTTLE MONOFILAMENT #1

#### DYONICS<sup>®</sup> PLATINUM BLADES

Reference #	Description
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#### DYONICS PLATINUM FLYER Blade

72205292	4.0mm FLYER PLATINUM
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#### SYNOVATOR<sup>®</sup> PLATINUM Blades

Reference #	Description
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72205107	3.5mm SYNOVATOR PLATINUM
72203523	4.5mm SYNOVATOR PLATINUM
72205110	4.5mm Curved SYNOVATOR PLATINUM
72203524	5.5mm SYNOVATOR PLATINUM

### Patient Positioning Systems

Reference #	Description
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#### ACUFEX<sup>®</sup> ACCESS Patient Positioning System

72205268	ACUFEX Access Positioning System includes: ACUFEX Access Positioning System ACUFEX Access Cart
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#### T-MAX Beach Chair Positioner

Reference #	Description
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7210551	T-MAX Beach Chair Positioner includes: Chair and Pad Assembly Head Positioning Assembly Table Leg Assembly Knee Bolster Lateral support (2 units)
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#### SPIDER2 Limb Positioner

Reference #	Description
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72203299	SPIDER2 Limb Positioner includes: SPIDER2 Limb Positioner Battery Charger Foot Pedal
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#### COBLATION<sup>®</sup> Wands

Reference #	Description
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72290038	FLOW 90 <sup>°</sup>
AC4340-01	COVATOR <sup>®</sup>

#### ACCU-PASS<sup>®</sup> Suture Shuttles

Reference #	Description
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7210423	ACCU-PASS 45 <sup>°</sup> , left
7210424	ACCU-PASS 45 <sup>°</sup> , right
7210425	ACCU-PASS 45 <sup>°</sup> , Upbend
7210426	ACCU-PASS Straight
7210427	ACCU-PASS Crescent
72200419	ACCU-PASS 70 <sup>°</sup> , Upbend
72200418	ACCU-PASS, big curve
72201076	ACCU-PASS, J hook

## Ordering information (cont.)

FIRSTPASS <sup>®</sup> MINI Suture Passer	
Reference #	Description
72290128	FIRSTPASS MINI Suture Passer
72290129	FIRSTPASS MINI Left Curved Suture Passer
72290130	FIRSTPASS MINI Right Curved Suture Passer

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## References

- 1.** ArthroCare Corporation 2016. Report: Design Verification, 1.8mm & 2.8 mm Q-Fix Suture Anchor P/N 49190-01 Rev.B. **2.** ArthroCare Corporation 2017. Report: Design Verification, 1.8mm Q-FIX MINI Soft Suture Anchor P/N 49190-03 Rev. B. **3.** Smith+Nephew 2020. Safety and Performance of Q-Fix All-Suture Anchor System 17-5010-11.
- 4.** ArthroCare 2019. Comparative Testing of Bone Anchor Devices, 1.8mm Q-FIX Mini Soft Suture Anchor P/N 49193-02 Rev.B. **5.** Barber FA, Herbert MA. All-Suture Anchors: Biomechanical Analysis of Pullout Strength, Displacement, and Failure Mode. *Arthroscopy*. 2017;33(6):1113-1121. **6.** Douglass NP, Behn AW, Safran MR. Cyclic and Load to Failure Properties of All-Suture Anchors in Synthetic Acetabular and Glenoid Cancellous Bone. *Arthroscopy*. 2017;33(5):977-985 e975. **7.** Nagra NS, Zargar N, Smith RD, Carr AJ. Mechanical properties of all-suture anchors for rotator cuff repair. *Bone Joint Res*. 2017;6(2):82-89. **8.** Ruder JA, Dickinson EY, Peindl RD, Habet NA, Trofa DP, Fleischli JE. Cyclic and Load-to-Failure Properties of All-Suture Anchors in Human Cadaveric Shoulder Glenoid Bone. *Arthroscopy*. 2019;35(7):1954-1959 e1954. **9.** ArthroCare Corporation 2017. 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Synthetic Bone Graft Substitutes. *Otolaryngol Clin North Am*. 1994 27(5):1037-1074. **17.** Walsh WR, Morberg P, Yu Y, et al. Response of a calcium sulfate bone graft substitute in a confined cancellous defect. *Clin Orthop Relat Res*. 2003(406):228-236. **18.** Calori GM, Mazza E, Colombo M, Ripamonti C. The use of bone-graft substitutes in large bone defects: Any specific needs? *Injury*. 2011;42(2):S56-S63. **19.** Arai E, Nakashima H, Tsukushi S, et al. Regenerating the fibula with beta-tricalcium phosphate minimizes morbidity after fibula resection. *Clin Orthop Relat Res*. 2005(431):233-237. **20.** Gaasbeek RD, Toonen HG, van Heerwaarden RJ, Buma P. Mechanism of bone incorporation of beta-TCP bone substitute in open wedge tibial osteotomy in patients. *Biomaterials*. 2005;26(33):6713-6719. **21.** Park K, Skidmore S, Hadar J, et al. Injectable, long-acting PLGA formulations: Analyzing PLGA and understanding microparticle formation. *J Control Release*. 2019;304:125-134. **22.** Chu C-C. Section IV:44, Biodegradable Polymeric Biomaterials: An Updated Overview. In: *The Biomedical Engineering Handbook*. Bronzino JD Ed. CRC Press.; 1995. **23.** Smith+Nephew 2019 Verification, Microraptor Knotless Real Time Degredation. Revision B. Internal Report 15007134. **24.** Smith+Nephew 2019. Verification, Microraptor Knotless Accelerated Degredation. Internal Report 15007045. **25.** Boileau P, Duysens C, Saliken D, Lemmex D, Bonneville N. All-arthroscopic, guided Eden-Hybbinette procedure using suture-button fixation for revision of failed Latarjet. *J Shoulder Elbow Surg*. 2019;28(11):e377-e388. **26.** Gendre P, Thélu C, d'Ollonne T, Trojani C, Gonzalez J, Boileau P. 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Report, Performance Characterization, 90 Degree Sports Medicine Wands Manufactured by Smith & Nephew, DePuy, Stryker, Arthrex, and Conmed. P/N 112090 Rev.A. **38.** Smith+Nephew 2020. Design Validation Testing, 4.0mm Platinum Flyer Blade 15009195 Rev.A. **39.** ArthroCare Corporation 2018.Report: FirstPass Mini Suture Passer Design Verification. P/N 90445-02 Rev.A. **40.** Smith & Nephew 2018.Report: FirstPass Mini Suture Passer Design Verification (Left and Right Versions). P/N 90445-03 Rev.A. **41.** ArthroCare Corporation 2017.Report: FirstPass Mini Design Validation. P/N 91840-01 Rev.A. **42.** Smith & Nephew 2018.Report: FirstPass Mini L&R Design Validation. P/N 91840-02 Rev.A.

Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Smith+Nephew representative or distributor if you have questions about the availability of Smith+Nephew products in your area.

Learn more at [smith-nephew.com](https://www.smith-nephew.com)

Smith & Nephew, Inc.  
150 Minuteman Road  
Andover, MA 01810  
USA

[www.smith-nephew.com](https://www.smith-nephew.com)  
T +978 749 1000  
US Customer Service:  
+1 800 343 5717

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