



Improved
performance,¹⁻²
increased access

 **smith&nephew**
MICRORAPTOR[®]
KNOTLESS
Suture Anchor
Supporting healthcare professionals



Improved performance¹⁻²

The MICRORAPTOR[®] Knotless Suture Anchor addresses the current lack of off-axis insertion capabilities for knotless repairs. **With its improved off-axis insertion performance¹**, when compared to other commercially available biocomposite knotless anchors, as well as its full-length inserter and rigid implant design, the MICRORAPTOR Knotless Suture Anchor gives surgeons increased access to previously difficult areas.



REGENSORB Material is absorbed and replaced by bone within 24 months.*⁴

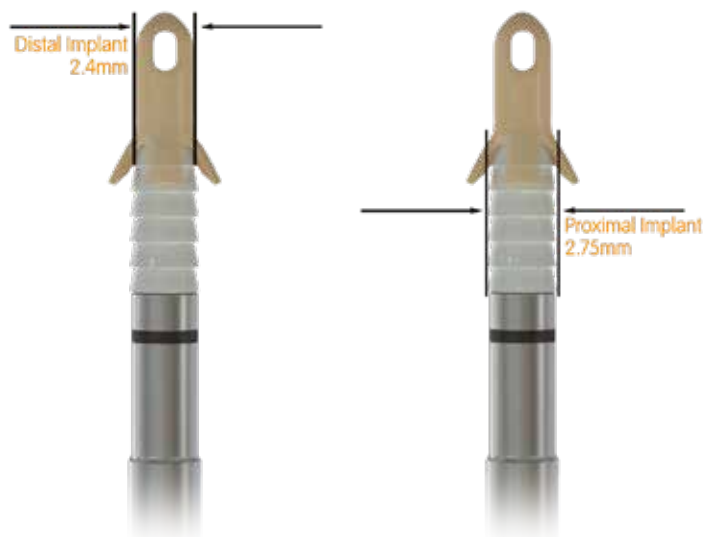
**In vivo animal testing has demonstrated that the composite material is bioabsorbable and is replaced by bone. Results of in vivo simulation have not been shown to quantitatively predict clinical performance. Data based on micro CT.*

MICRORAPTOR[◇] Knotless

Suture Anchor features

Less volume³

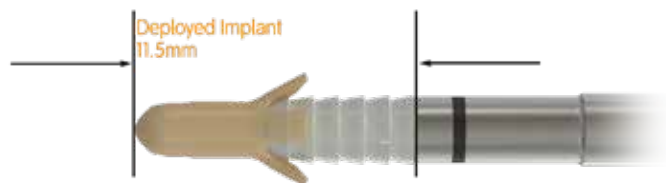
Less overall implant volume when compared to Arthrex[®] PushLock PEEK suture anchor and Stryker[®] CinchLock SS Knotless Anchor.³



*in deployed state

Shorter length³

Additionally, the MICRORAPTOR Knotless Suture Anchor offers significantly shorter overall construct length post-anchor deployment compared to Arthrex[®] PushLock Biocomposite Anchor Short Arthrex[®] PushLock BioComposite Anchor & Stryker[®] CinchLock SS Knotless Anchor.³



*in deployed state

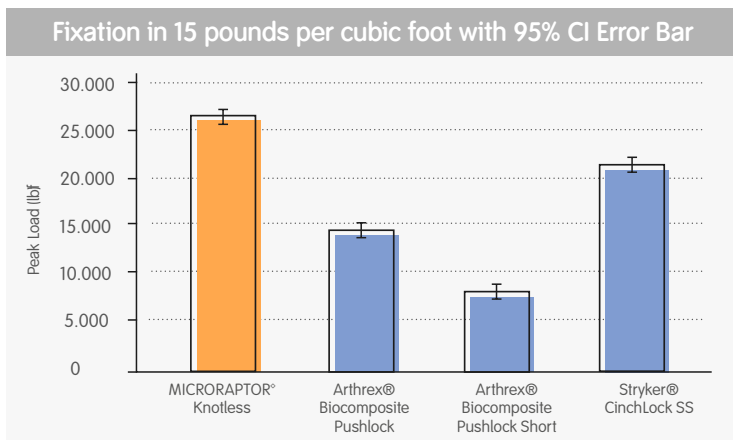
Superior strength*²

Superior fixation strength when compared to other commercially available knotless anchors.²

On average, MICRORAPTOR Knotless Suture Anchor provides:

- 71% higher anchor fixation strength than Arthrex[®] Biocomposite PushLock Short
- 47% higher anchor fixation strength than Arthrex[®] Biocomposite Pushlock
- 21% higher anchor fixation strength than Stryker[®] CinchLock SS knotless anchor

*Based on in *vitro* testing

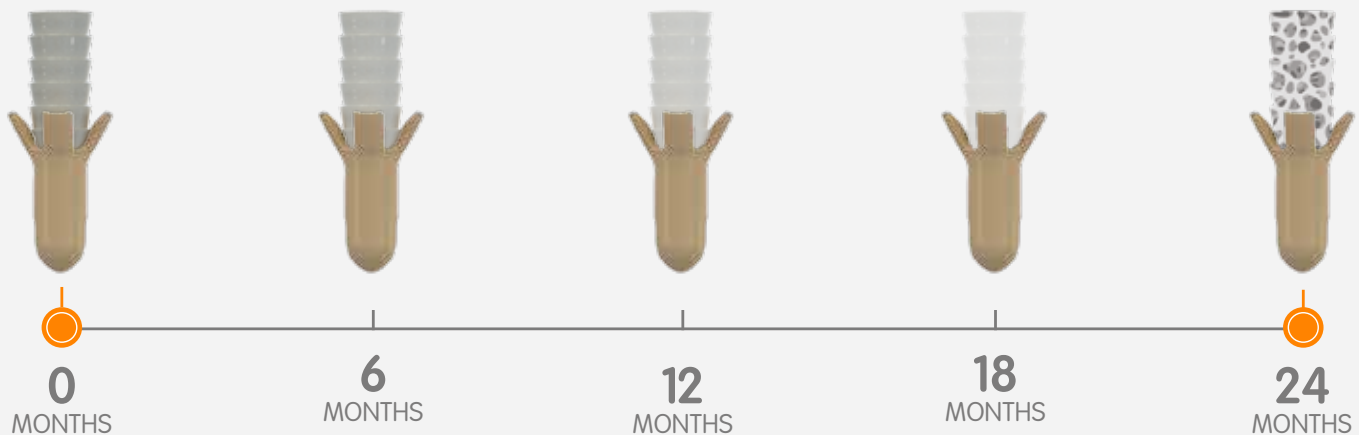


2

Absorption and bone replacement

The timeline of implant

Smith & Nephew REGENESORB material is designed to remain mechanically stable for a minimum of six months before being absorbed and replaced by bone within 24 months.*⁹

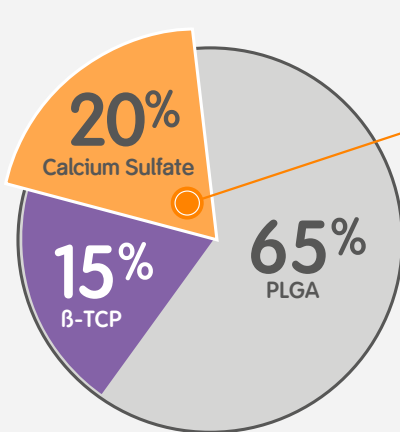


**In vivo animal testing has demonstrated that the composite material is bioabsorbable and is replaced by bone. Results of in vivo simulation have not been shown to quantitatively predict clinical performance. Data based on micro CT.*

Replaced by bone*

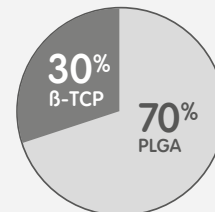
REGENESORB[◇] material

Calcium sulfate makes the difference in REGENESORB

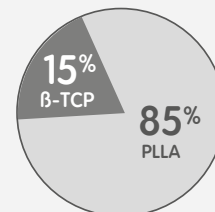


- Calcium Sulfate:** Works in early healing stages at 4-12 weeks^{5, 8}
- β-TCP:** Sustained bone formation over 18 months¹²
- PLGA:** Comprised of natural products – lactic acid and glycolic acid¹²

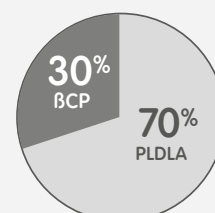
Most biocomposite materials rely solely on the osteoconductive properties of β-TCP, which provides sustained bone formation over 18 months⁶ and acts primarily as a scaffold for enhancing new bone formation.¹¹ REGENESORB material includes a second osteoconductive material, calcium sulfate, which has been shown to work in the early stages (4-12 weeks) of bone healing⁶. REGENESORB material contains two osteoconductive components – β-TCP and calcium sulfate – which act during different stages in the bone healing process and through different mechanisms of action, physical and biochemical. REGENESORB material is unique in this regard. **No other biocomposite material can claim this.**



Mitek Biocryl™¹²



Arthrex® BioComposite™ Anchor¹³

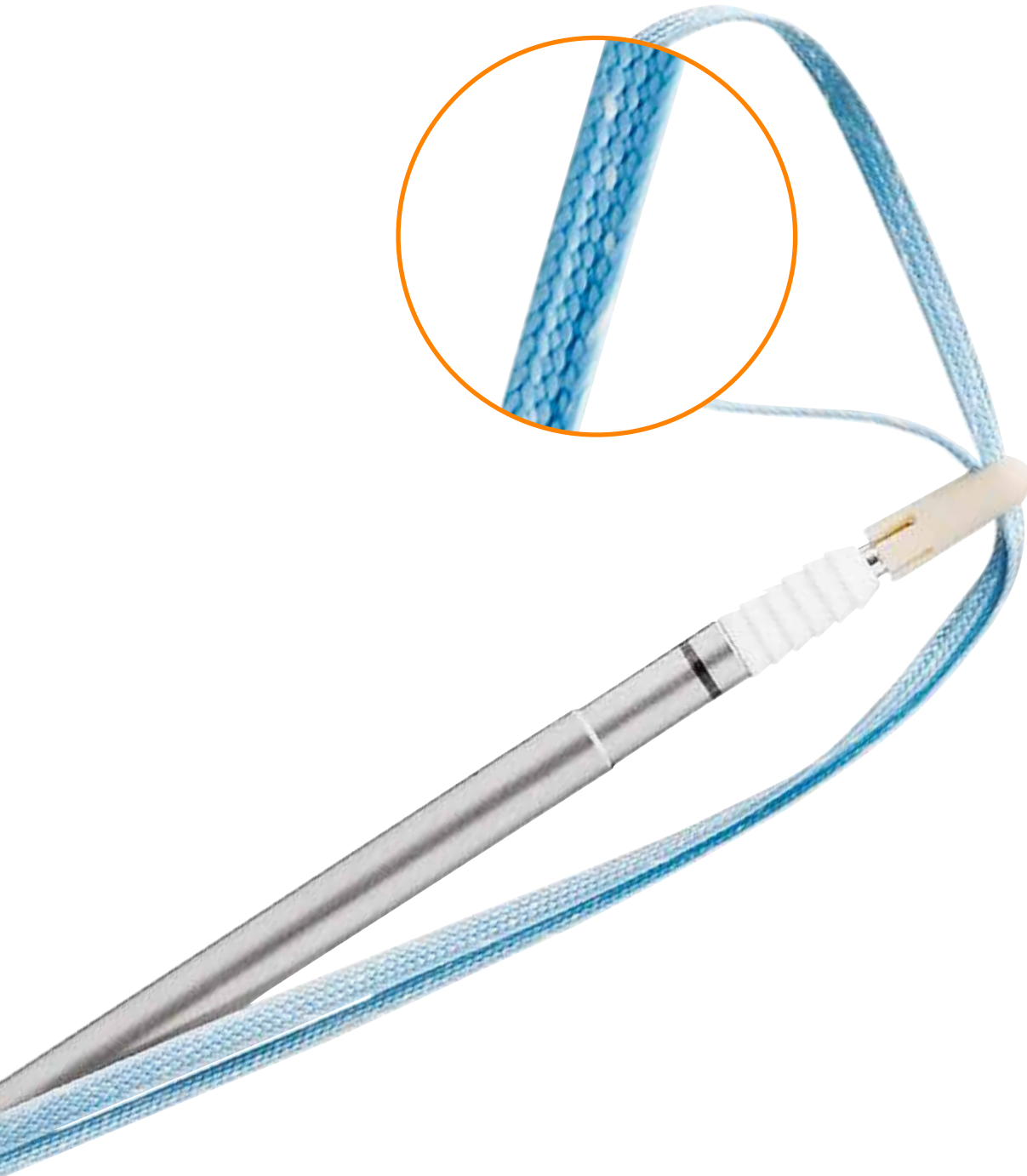


Arthrex® BioComposite™ Screw¹³

A smooth suture tape

MINITAPE[®] is a smooth suture tape offering a significantly lower and more evenly distributed level of pressure.*¹²

It is conveniently available in single packs or on MICRORAPTOR[®] Knotless Suture Anchors and can be easily passed through tissue.



*Based on *in vitro* testing



Ordering information

MICRORAPTOR® Knotless Suture Anchor and Guide System

Reference #	Description
MICRORAPTOR KNOTLESS Implants	
72205020	MICRORAPTOR KNOTLESS RG
72205021	MICRORAPTOR KNOTLESS PK
MICRORAPTOR KNOTLESS Drill Bits	
72205022	MICRORAPTOR KNOTLESS Drill Shoulder, 2.2mm
72205169	MICRORAPTOR KNOTLESS Drill Hip, 2.6mm
MICRORAPTOR KNOTLESS Suture*	
72205129	MINITAPE® COBRAID White
72205128	MINITAPE COBRAID Blue
72205127	MINITAPE Blue
MICRORAPTOR KNOTLESS Drill Guides	
72204991	MICRORAPTOR Drill Guide, Crown Tip
72204992	MICRORAPTOR Drill Guide, Spike Tip
72204995	MICRORAPTOR Drill Guide, Fishmouth Tip
MICRORAPTOR KNOTLESS Obturators	
72204999	MICRORAPTOR Obturator, Blunt Tip
72205000	MICRORAPTOR Obturator, Blunt Tip, Cannulated
72205001	MICRORAPTOR Obturator, Trocar Tip

*Other compatible sutures are available.

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

www.smith-nephew.com
T +978 749 1000
US Customer Service:
+1 800 343 5717

®Trademark of Smith & Nephew.
©2019 Smith & Nephew. All rights reserved. All trademarks acknowledged.
Printed in USA. 17318 V2 05/19

Supporting healthcare professionals for over 150 years

References

1. Data on file at Smith & Nephew, report number 15008464, 2019. 2. Data on file at Smith & Nephew, report number 15008252, 2019. 3. Data on file at Smith & Nephew, report number 15008255, 2019. 4. Barnes, G. A Unique Formulation of Materials with Long Histories of Clinical Use. REGENESORB Absorbable Biocomposite Material, 2013. 5. Hak DJ. The use of osteoconductive bone graft substitutes in orthopaedic trauma. J Am Acad Orthop Surg. 2007;15:525-536. 6. Costantino PD, Friedman CD. Synthetic bone graft substitutes. Otolaryngol Clin North Am. 1994;27:1037-1074. 7. Walsh WR, Morberg P, Yu Y, Response of a Calcium Sulfate Bone Graft Substitute in a Confined Cancellous Defect. Clin. Orthop.Rel. Res. 2003 Jan;(406):228-36. 8. Allison DC, Lindberg AW, Samimi B, Mirzayan R, Menendez LR. A comparison of mineral bone graft substitutes for bone defects. US Oncol Hematol. 2011;7:38-49. 9. Data on file at Smith & Nephew, report no. 1500897, 2012 10. Data on file at Smith & Nephew, report no. 15001193, 2011 11. Data on file at Smith & Nephew, report no. 15007770, 2018. 12. Data on File at Smith & Nephew, report no. 15001847, 2013.