

+ Redefining biological healing

Where others aim to improve, we redefine.



REGENETEN[◇]
Bioinductive Implant
Tissue growth¹⁻³



HEALICOIL[◇]
REGENESORB[◇]
Suture Anchor
Tendon thickening⁵



HEALICOIL[◇]
KNOTLESS
Suture Anchor
Open architecture^{4,5}



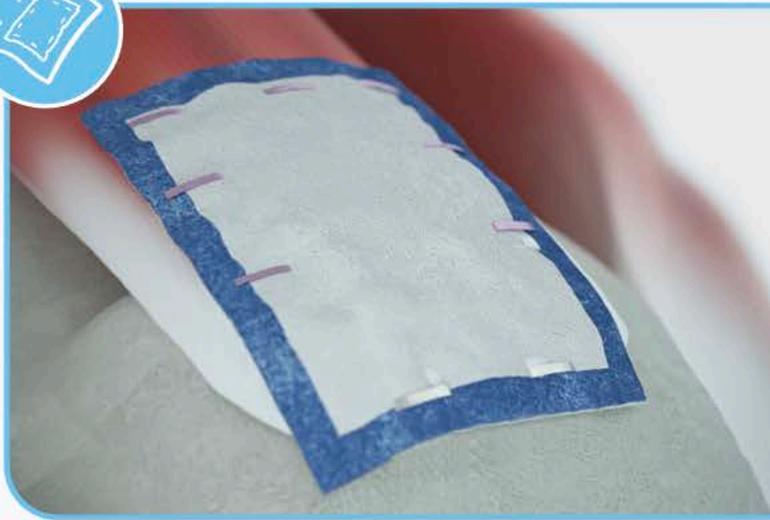
REGENESORB[◇]
Material
Bone replacement⁶⁻⁸

Smith+Nephew

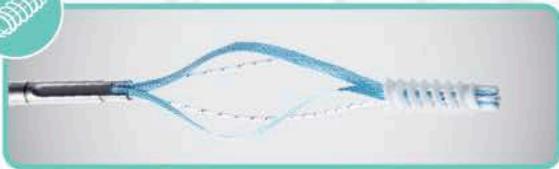
ADVANCED HEALING
SOLUTIONS
Biological Portfolio



Powered by evidence



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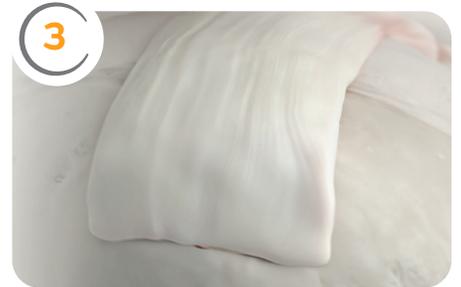
REGENESORB
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Bone replacement⁶⁻⁸





+ Changing the course of rotator cuff progression

The REGENETEN Bioinductive Implant supports the body’s natural healing response to promote new tendon-like tissue growth and change the course of tear progression.^{1,2,9-11} Derived from highly purified bovine Achilles tendon, it creates an environment that is conducive to healing.^{1,2,9,27}



What it is and how it works

- Proprietary, highly porous implant design facilitates the formation of new tendon-like tissue.^{1,2,9,27}
- New tissue reduces the peak strain at the site of the tear.^{12**}
- Histology at 6 months show dense regularly orientated tendon-like tissue at the site of implantation.^{9,13*}

* On human biopsy (n=1) and in-vivo sampling

** based on finite element analysis



*REGENETEN is...restorative, not reparative.
If you believe in biology, this is a big step.*



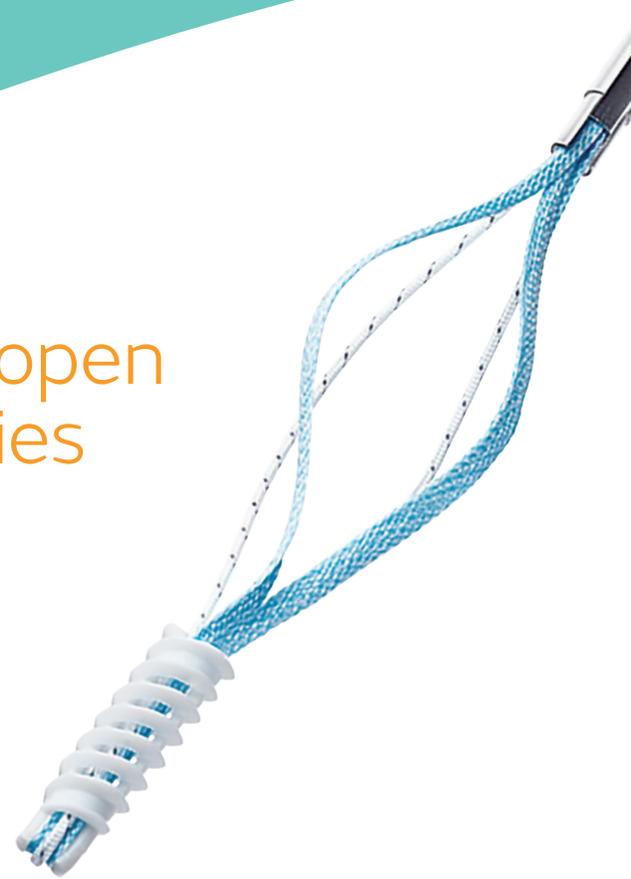
Felix H. "Buddy" Savoie III, MD
Chairman of Orthopaedic Surgery
Chief of Sports Medicine
Tulane University School of Medicine
New Orleans, LA



+ Open-architecture, now open to even greater possibilities

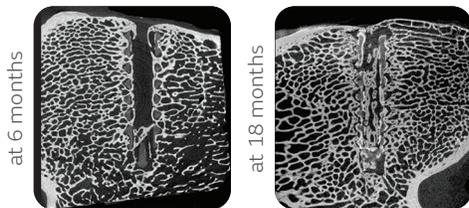
The unique open-architecture design of HEALICOIL anchors reduces the amount of implanted material in the shoulder compared to traditional, solid-core anchors.²⁸

- May facilitate greater increase in rotator cuff thickness vs competitor⁵
- May provide a biologic healing advantage^{4,5}

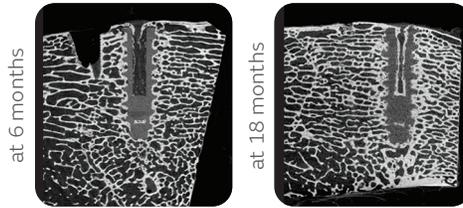


Faster, more complete bone infill than Arthrex's Biocomposite material.

HEALICOIL[◊] REGENESORB[◊]



Arthrex Biocomposite Corkscrew[®] FT



Comparisons of bone infill, measured via μ CT, at 6 and 18 months in a pre-clinical study.⁸



The real advantage of the [HEALICOIL] open architecture is that the stem cells from the bone marrow can reach the bone-tendon interface to promote healing where it is most needed.

Jan Vonhoegen, MD
Specialist for Orthopaedics and Trauma Surgery





+ Least amount of suture displacement during cyclic loading vs competitors¹⁴

69%

less suture displacement than Arthrex BioComposite SwiveLock[®] 5.5mm Self-Punching (SP) after cyclic loading for 500 cycles*

94%

less suture displacement than Healix Advance[™] 5.5mm SP Biocomposite Anchor after cyclic loading for 500 cycles**

Proven internal locking mechanism¹⁵

By descending a plug in the distal implant, the suture is securely locked in place providing an additional point of fixation.***



Most open architecture design vs competitors^{16****}

- Three times more open than Arthrex BioComposite SwiveLock[®] 4.75mm SP
- Four times more open than Arthrex BioComposite SwiveLock[®] 5.5mm SP
- May facilitate healing by allowing access of bone marrow and associated stem cells to the repair site^{4,5}
- Shown to facilitate better bone ingrowth than solid anchors^{4,17}



Least amount
of foreign material vs competitors^{16****}

* As demonstrated in benchtop testing; p = 0.002

** As demonstrated in benchtop testing; p < 0.001; All Healix Advance 5.5 mm SP Biocomposite Anchors failed to complete the cyclic loading due to suture slipping within the anchor construct under the maximum cyclic load of 45 N

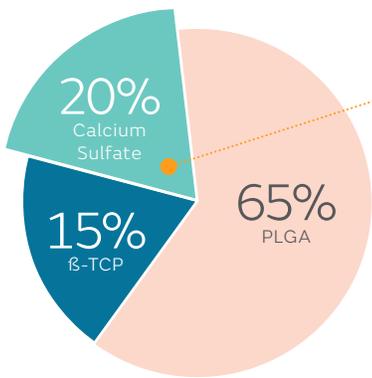
*** As demonstrated in benchtop testing

**** Compared to Arthrex, BioComposite SwiveLock 4.75mm SP, 5.5mm SP and Healix Advance 5.5mm SP Biocomposite Anchor



+ No other biocomposite can do this, a unique formulation of proven materials

Effective absorption and bone replacement in 24 months.^{6-8*} REGENESORB material is designed to provide a jump start in bone healing and formation.



Calcium sulfate makes the difference in REGENESORB^{19, 29, 30}

Calcium Sulfate: Works in early healing stages at 4-12 weeks¹⁸⁻²⁰

β-TCP: Sustained bone formation for up to 2 years^{21, 22}

PLGA: Comprised of natural products — lactic acid and glycolic acid^{23, 24}

Absorption and bone replacement The timeline of implant

REGENESORB material is designed to remain mechanically stable for a minimum of six months^{**} before being absorbed and replaced by bone within 24 months.^{6-8, 25, 26*}



* Demonstrated clinically and *in vivo*
** As demonstrated *in vivo*



The difference for me with REGENESORB is its base is PLGA, which has different resorption characteristics and tends to resorb. On MRI follow-ups of patients, we noticed the material is actually changing to bone, and much earlier too — usually in less than two years — it's a major advantage.

Ian Lo, MD FRCS(C) Assistant Professor
University of Calgary



Ordering information

REGENETEN® Implants

Reference #	Description
4565	Medium Bioinductive Implant with Arthroscopic Delivery, 1 per package
4566	Large Bioinductive Implant with Arthroscopic Delivery, 1 per package

REGENETEN Anchors

Reference #	Description
4403	Bone Anchors with Advanced Delivery System, 3 per package
2504-1	Tendon Anchors, 8 per package

REGENETEN Accessory Devices

Reference #	Description
4173-1	Tendon Marker, 2 per package
4402	Tendon Stabilizing Guide, 1 per package
2503-S	Bone Anchor, 1 per package

ULTRATAPE® Suture Passing Instrumentation

Reference #	Description
72204385	ARTHRO-PIERCE® ULTRATAPE, 35° up

HEALICOIL® REGENESORB® Suture Anchors Pre-loaded with ULTRATAPE and ULTRABRAID®

Reference #	Description
72203705	HEALICOIL REGENESORB Suture Anchor, 4.75mm, with one ULTRATAPE Suture, blue, and one #2 ULTRABRAID Suture, cobraid-black
72203697	HEALICOIL REGENESORB Suture Anchor, 4.75mm, with one ULTRATAPE Suture, cobraid blue, and one #2 ULTRABRAID Suture, blue
72203708	HEALICOIL REGENESORB Suture Anchor, 5.5mm, with one ULTRATAPE Suture, blue, and one #2 ULTRABRAID Suture, cobraid black
72203801	HEALICOIL REGENESORB Suture Anchor, 5.5mm, with one ULTRATAPE, cobraid blue, and one #2 ULTRABRAID Suture, blue
72203704	HEALICOIL REGENESORB Suture Anchor, 4.75mm, with two #2 ULTRABRAID® sutures, blue, cobraid blue
72203706	HEALICOIL REGENESORB Suture Anchor, 5.5mm, with two #2 ULTRABRAID sutures, blue, cobraid blue
72203707	HEALICOIL REGENESORB Suture Anchor, 5.5mm with three #2 ULTRABRAID sutures, blue, cobraid blue, cobraid black

HEALICOIL REGENESORB Accessory Devices

Reference #	Description
72203709	HEALICOIL REGENESORB Threaded Dilator, 4.75mm, reusable
72203710	HEALICOIL REGENESORB Threaded Dilator, 5.5mm, reusable
72203951	HEALICOIL REGENESORB Threaded Dilator, 4.75mm, disposable
72203952	HEALICOIL REGENESORB Threaded Dilator, 5.5mm, disposable

HEALICOIL PK Suture Anchor Pre-loaded with ULTRATAPE and ULTRABRAID

Reference #	Description
72203981	HEALICOIL PK Suture Anchor, 4.5mm, with one ULTRATAPE Suture, blue
72203982	HEALICOIL PK Suture Anchor, 4.5mm, with one ULTRATAPE Suture, cobraid blue
72203983	HEALICOIL PK Suture Anchor, 5.5mm, with one ULTRATAPE Suture, blue, and one #2 ULTRABRAID Suture, cobraid black
72203984	HEALICOIL PK Suture Anchor, 5.5mm, with one ULTRATAPE Suture, cobraid blue, and one #2 ULTRABRAID Suture, blue
72203378	HEALICOIL PK Suture Anchor, 4.5mm, with two #2 ULTRABRAID Sutures, blue, cobraid blue
72203379	HEALICOIL PK Suture Anchor, 5.5mm, with two #2 ULTRABRAID Sutures, blue, cobraid blue
72203380	HEALICOIL PK Suture Anchor, 5.5mm, with three #2 ULTRABRAID Sutures, blue, cobraid blue, cobraid black

HEALICOIL PK Accessory Devices

Reference #	Description
72202621	Tapered Awl, 3.8mm, disposable
72201915	Tapered Awl, 3.8mm, reusable
72202633	HEALICOIL/TWINFIX® ULTRA Threaded Dilator, 4.5mm, reusable
72203634	HEALICOIL/TWINFIX ULTRA Threaded Dilator, 5.5mm, reusable

Ordering information (cont.)

HEALICOIL Knotless Suture Anchors	
Reference #	Description
72205135	HEALICOIL Knotless REGENESORB Suture Anchor, 5.5mm
72205136	HEALICOIL Knotless REGENESORB Suture Anchor, 5.5mm, self-tapping
72205137	HEALICOIL Knotless PK Suture Anchor, 5.0mm
72205138	HEALICOIL Knotless PK Suture Anchor, 5.0mm, self-tapping

HEALICOIL Knotless Suture Anchor Hole Prep	
Reference #	Description
72201915	Tapered Awl, 3.8mm, reusable
72202621	Tapered Awl, 3.8mm, disposable
72205308	HEALICOIL Knotless Spade Drill, 4.75mm, reusable
72203710	Threaded Dilator, 5.5mm, reusable
72203952	Threaded Dilator, 5.5mm, disposable

ULTRATAPE [®] Suture	
Reference #	Description
72203896	ULTRATAPE Suture, blue, 6 per box
72203897	ULTRATAPE Suture, cobraid blue, 6 per box

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

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