# Redefining biological healing

Where others aim to improve, we redefine.



REGENETEN Bioinductive Implant
Tissue growth 1-3



HEALICOIL
REGENESORBO
Suture Anchor

Tendon thickening<sup>5</sup>



HEALICOIL<sup>†</sup>
KNOTLESS
Suture Anchor
Open architecture<sup>4,5</sup>



REGENESORB Material Bone replacement<sup>6-8</sup>

**Smith**Nephew

ADVANCED HEALING SOLUTIONS

Biological Portfolio



# Powered by evidence





HEALICOIL
REGENESORBO
Suture Anchor
Tendon thickening<sup>5</sup>



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REGENESORB Material

Bone replacement<sup>6-8</sup>



## 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.<sup>1, 2, 9-11</sup> Derived from highly purified bovine Achilles tendon, it creates an environment that is conducive to healing.<sup>1, 2, 9, 27</sup>







#### What it is and how it works

- Proprietary, highly porous implant design facilitates the formation of new tendon-like tissue.
- New tissue reduces the peak strain at the site of the tear.<sup>12\*</sup>
- 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



4

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 T T

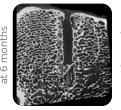
## Open-architecture, now open to even greater possibilities

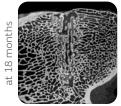
The unique open-architecture design of HEALICOIL anchors reduces the amount of implanted material in the shoulder compared to traditional, solid-core anchors.<sup>28</sup>

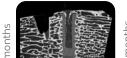
- May facilitate greater increase in rotator cuff thickness vs competitor<sup>5</sup>
- May provide a biologic healing advantage4,5

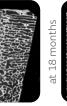
Faster, more complete bone infill than Arthrex's Biocomposite material.

#### **HEALICOIL® REGENESORB®**

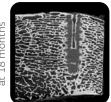








Arthrex Biocomposite Corkscrew® FT



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



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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 competitors<sup>14</sup>

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 mechanism<sup>15</sup>

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<sup>16</sup>\*\*\*\*

- 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<sup>4,5</sup>
- Shown to facilitate better bone ingrowth than solid anchors<sup>4,17</sup>



<sup>\*</sup> As demonstrated in benchtop testing; p = 0.002

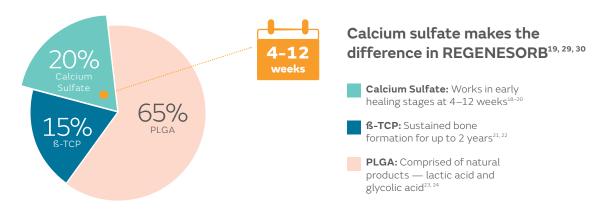
<sup>\*\*</sup> As demonstrated in benchtop testing; p < 0.001; All Healix Advance 5.5 mm SP Biocomposite Anchors failed to complete the cyclic loading due to suture slipping within the anchor construct under the maximum cyclic load of 45 N

<sup>\*\*\*</sup> As demonstrated in benchtop testing

<sup>\*\*\*\*</sup> 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.<sup>6-8</sup>\* REGENESORB material is designed to provide a jump start in bone healing and formation.



### 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.<sup>6-8, 25, 26\*</sup>



\* Demonstrated clinically and 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	I° Implants		REGENESORB° Suture Anchors Pre-loaded	
Reference #	Description	with MINITAF	PE°	
72225226	Medium Bioinductive Implant with	Reference #	Description	
72205306	Arthroscopic Delivery (1)  Large Bioinductive Implant with	72205386	HEALICOIL REGENESORB Suture Anchor 4.75mm, with three MINITAPE Sutures	
72205307	Arthroscopic Delivery (1)	72205388	HEALICOIL REGENESORB Suture Anchor	
REGENETEN		HEALICOIL I	REGENESORB Accessory Devices	
Reference #	Description	Reference #	Description	
72205205	Bone Anchors (3) with Arthroscopic Delivery System	72203709	HEALICOIL REGENESORB Threaded Dila	
72205201	Tendon Anchors (8)		4.75mm, reusable  HEALICOIL REGENESORB Threaded Dila	
REGENETEN	Accessory Devices	72203710	5.5mm, reusable	
Reference #	Description	72203951	HEALICOIL REGENESORB Threaded Dila	
72205202	Tendon Marker (2)	72203931	4.75mm, disposable	
72205206	Tendon Stabilizing Guide (1)	72203952	HEALICOIL REGENESORB Threaded Dila 5.5mm, disposable	
72205199	Bone Anchor (1)	HEALICOIL I	PK Suture Anchor Pre-loaded with	
	REGENESORB° Suture Anchors Pre-loaded	ULTRATAPE	and ULTRABRAID	
	ΓΑΡΕ and ULTRABRAID°	Reference #	Description	
72203705	Description  HEALICOIL REGENESORB Suture  Anchor, 4.75mm, with one ULTRATAPE Suture, blue, and one #2 ULTRABRAID	72203981	HEALICOIL PK Suture Anchor, 4.5mm, with one ULTRATAPE Suture, blue	
		72203982	HEALICOIL PK Suture Anchor, 4.5mm, with one ULTRATAPE Suture, cobraid blu	
72203697	Suture, cobraid-black  HEALICOIL REGENESORB Suture Anchor, 4.75mm, with one ULTRATAPE Suture,	72203983	HEALICOIL PK Suture Anchor, 5.5mm, with one ULTRATAPE Suture, blue, and one #2 ULTRABRAID Suture, cobraid bla	
	cobraid blue, and one #2 ULTRABRAID Suture, blue  HEALICOIL REGENESORB Suture Anchor,	72203984	HEALICOIL PK Suture Anchor, 5.5mm, with one ULTRATAPE Suture, cobraid blu and one #2 ULTRABRAID Suture, blue	
72203708	5.5mm, with one ULTRATAPE Suture, blue, and one #2 ULTRABRAID Suture, cobraid black	72203378	HEALICOIL PK Suture Anchor, 4.5mm, with two #2 ULTRABRAID Sutures, blue, cobraid blue	
72203801	HEALICOIL REGENESORB Suture Anchor, 5.5mm, with one ULTRATAPE, cobraid blue, and one #2 ULTRABRAID Suture, blue	72203379	HEALICOIL PK Suture Anchor, 5.5mm, with two #2 ULTRABRAID Sutures, blue, cobraid blue	
72203704	HEALICOIL REGENESORB Suture Anchor, 4.75mm, 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	
72203706	HEALICOIL REGENESORB Suture Anchor, 5.5mm, with two #2 ULTRABRAID sutures, blue, cobraid blue	HEALICOIL PK Suture Anchors Pre-loaded with MINITAP		
		Reference #	Description	
72203707	HEALICOIL REGENESORB Suture Anchor, 5.5mm with three #2 ULTRABRAID sutures, blue, cobraid blue, cobraid black	72205381	HEALICOIL PK Suture Anchor, 4.5mm, with two MINITAPE Sutures	
		72205382	HEALICOIL PK Suture Anchor, 5.5mm, with two MINITAPE Sutures	
			5.511111, WISH COVOT III VITAL E SUCULCS	

with MINITAP	PE°
Reference #	Description
72205386	HEALICOIL REGENESORB Suture Anchor, 4.75mm, with three MINITAPE Sutures
72205388	HEALICOIL REGENESORB Suture Anchor, 5.5mm, with three MINITAPE Sutures
HEALICOIL F	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
	PK Suture Anchor Pre-loaded with 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 P	K Suture Anchors Pre-loaded with MINITAPE°
Reference #	Description
72205381	HEALICOIL PK Suture Anchor, 4.5mm, with two MINITAPE Sutures
72205382	HEALICOIL PK Suture Anchor, 5.5mm, with two MINITAPE Sutures
72205383	HEALICOIL PK Suture Anchor, 5.5mm, with three MINITAPE Sutures

#### Ordering information (cont.)

HEALICON	DIV Assessmy Davises			
HEALICOIL F	PK Accessory Devices			
Reference #	Description			
72202621	Tapered Awl, 3.8mm, disposable			
72201915	Tapered Awl, 3.8mm, reusable			
72202633	HEALICOIL/TWINFIX° ULTRA			
72202033	Threaded Dilator, 4.5mm, reusable			
72203634	HEALICOIL/TWINFIX ULTRA			
72203034	Threaded Dilator, 5.5mm, reusable			
HEALICOIL Knotless Suture Anchors				
Reference #	Description			
72205135	HEALICOIL Knotless REGENESORB			
72205135	Suture Anchor, 5.5mm			
72205136	HEALICOIL Knotless REGENESORB			
72205136	Suture Anchor, 5.5mm, self-tapping			
72205137	HEALICOIL Knotless PK Suture Anchor,			
/ 220313/	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			

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