



A SOLUTION TO A WEAK LINK IN  
ROTATOR CUFF HEALING



WHERE INNOVATION MEETS HEALING™






**BioCharge®** is a bioresorbable matrix designed to address the healing environment on the bursal side of the rotator cuff, while improving tissue quality and deterring suture cut-through. With an integrated delivery system, there is no secondary fixation, reducing implantation time and eliminating the risk of further tendon damage.

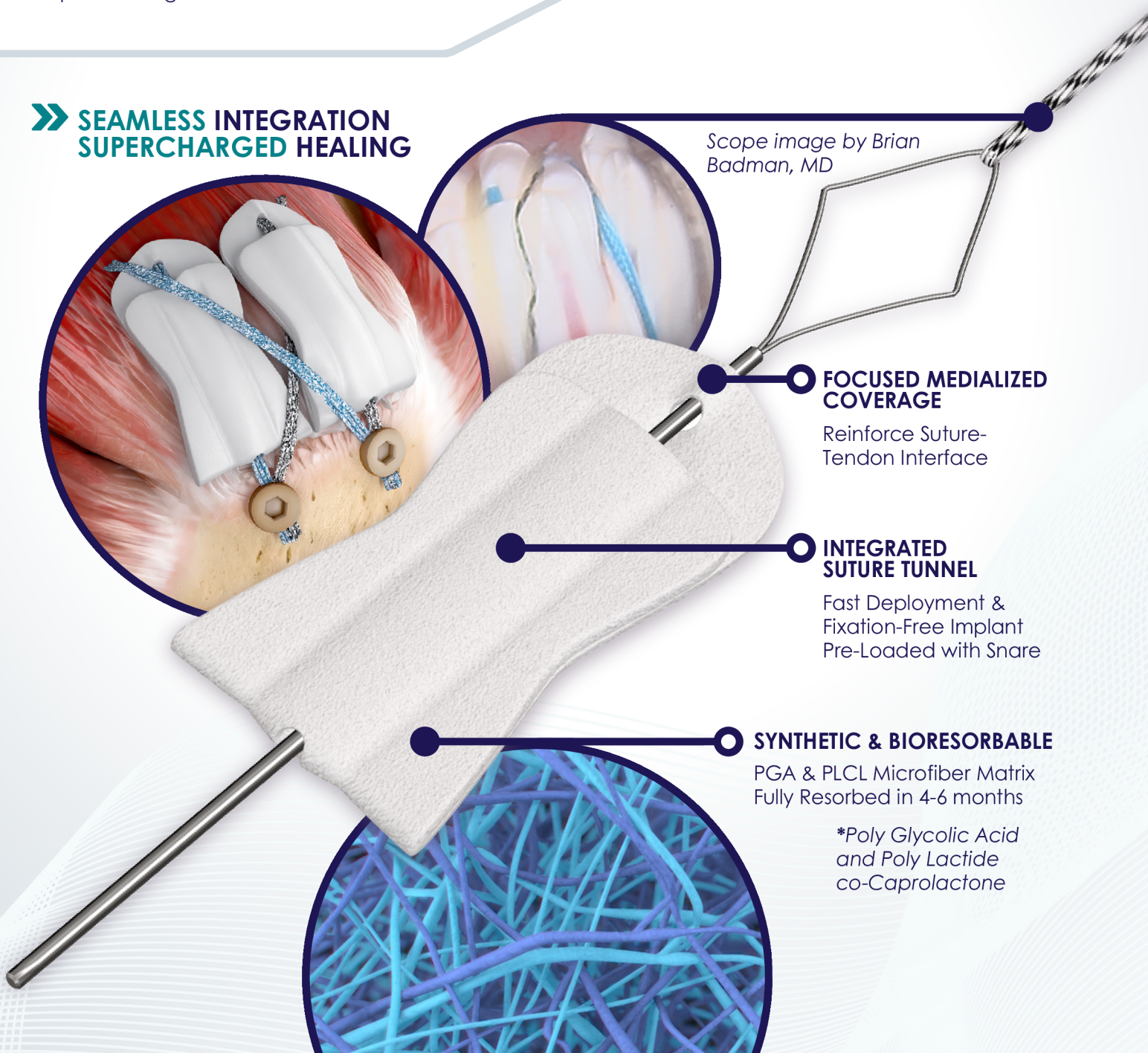
## » A SOLUTION TO A WEAK LINK IN ROTATOR CUFF HEALING

The inability of the tendon-suture interface to heal properly is recognized as an area of concern following rotator cuff repair (RCR) failure, whereby sutures may tear through weakened tendon tissue at points of high stress.

## AVERAGE ROTATOR CUFF RETEAR RATE IN LITERATURE

35% 

## » SEAMLESS INTEGRATION SUPERCHARGED HEALING



Scope image by Brian Badman, MD

### FOCUSED MEDIALIZED COVERAGE

Reinforce Suture-Tendon Interface

### INTEGRATED SUTURE TUNNEL

Fast Deployment & Fixation-Free Implant  
Pre-Loaded with Snare

### SYNTHETIC & BIORESORBABLE

PGA & PLCL Microfiber Matrix  
Fully Resorbed in 4-6 months

\*Poly Glycolic Acid  
and Poly Lactide  
co-Caprolactone

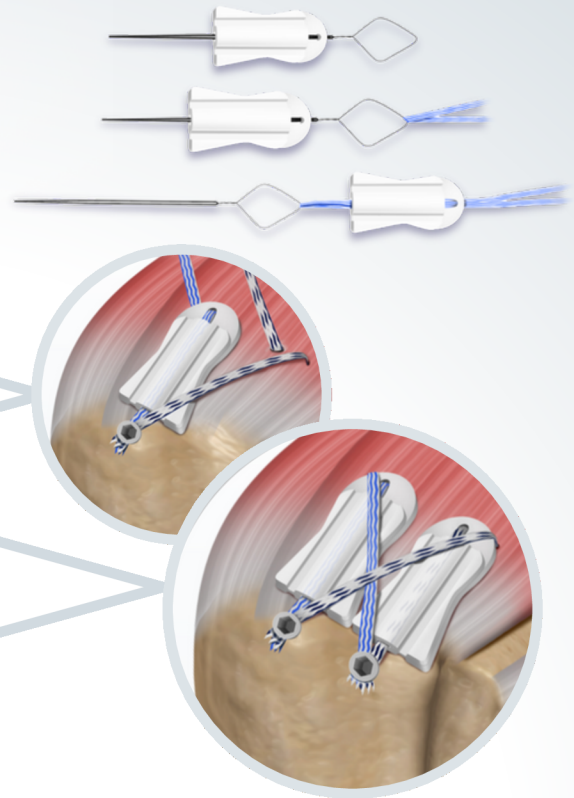


## EFFICIENT TECHNIQUE STEPS

» 1 Using sutures from medial row anchor, load suture through snare and pull through **BioCharge®** tunnel.

» 2 Shuttle **BioCharge®** down cannula, retrieve additional sutures, and place lateral anchor.

» 3 Retrieve suture for 2nd **BioCharge®** and repeat steps 2-3 for 2nd lateral row anchor.

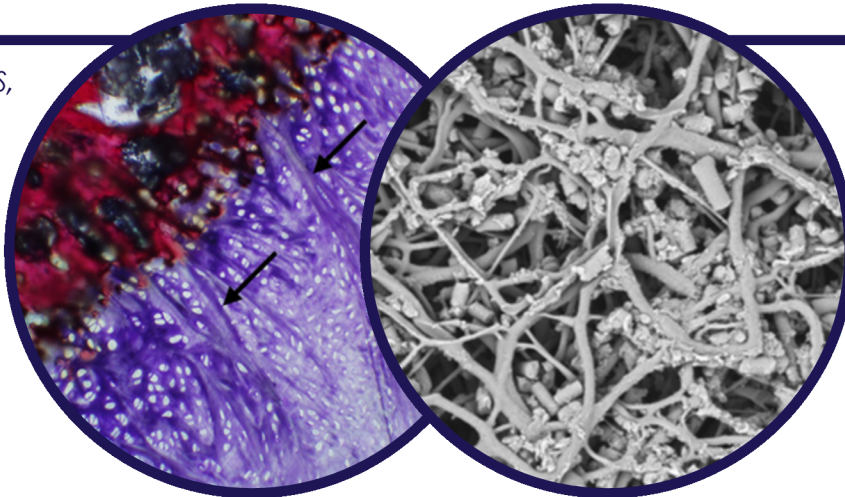


## DATA DRIVEN TECHNOLOGY

### MIMICS NATIVE ECM

Promotes Healing Through Cellular Proliferation and Integration.

Sheep CSU Study (JSES, 2022), Winner of the 2023 Neviaser Award for Basic Science by ASE & JSES : Development of Sharpey's like fibers at the tendon-bone interface using an interpositional nanofiber scaffold.



Proliferation of human tenocytes into **ROTUM®** scaffold after 4 weeks (Data on file)

## CONFIDENCE IN SYNTHETICS

BioCharge® supercharges healing at the suture-tendon interface by promoting cellular interactions to drive healing. Degradative polymer contributions:

### GLYCOLIC ACID<sup>6,7,9</sup>

- Anti-Inflammatory properties
- Increases fibroblast proliferation & production of collagen & HA

### LACTIC ACID<sup>5,8,10</sup>

- Modulates inflammation & accelerates cellular migration
- Promotes ECM deposition & reparative angiogenesis

### CAPROIC ACID<sup>7</sup>

- Anti-microbial properties
- Anti-inflammatory properties

## SIMPLIFIED IMPLANTATION



### EFFICIENT

Shared suture loading through integrated tunnel



### SMART ECONOMICS

No additional fixation or disposables



### ADAPTABLE

For tears of any size and anchor-agnostic



### SAFE & BIOCOMPATIBLE

No human or animal sourced materials

## PRODUCT INFORMATION

**BioCharge®** is intended to be used in conjunction with suture anchors for the reattachment of tendon to bone in rotator cuff repairs (Reference: FDA 510k Clearance K241912)



### BIOCHARGE® AUTOBIOLOGIC MATRIX IMPLANT

2cm x 1.2 cm, 1.7mm thickness



### ROTIVM® BIORESORBABLE WICK IMPLANT

2cm x 2cm, 4cm x 3cm, 0.85mm thickness

## CONTACT YOUR ATREON REPRESENTATIVE FOR MORE INFORMATION

[www.atreonortho.com/Contact-Us/](http://www.atreonortho.com/Contact-Us/)

PART #	DESCRIPTION	QTY	UNIT OF MEASURE
BC-2012	<b>BioCharge®</b> Autobiologic Matrix Implant Single Pack (2cm x 1.2cm)	1	Each
FG-0007	<b>ROTIVM®</b> Bioresorbable Wick Implant (2cm x 2cm)	1	Each
FG-0043	<b>ROTIVM®</b> Bioresorbable Wick Implant (4cm x 3cm)	1	Each



Legal Manufacturer: Nanofiber Solutions

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614-429-1471 | [www.atreonortho.com](http://www.atreonortho.com)

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♦ All claims supported by data on file § References available upon request

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View U.S. patent information at <https://nanofibersolutions.com/technology/>

“ Easy to use and the only company [Atreon Orthopedics] providing biology now to both sides of the tendon. ”

**Brian Badman, MD**

“ Simple to use and all the benefits of augmentation for tendon injuries. ”

**Shariff K. Bishai, D.O.**