

## + Evidence in focus

Publication summary: Bokor DJ, et al. *MLTJ*. (2019)\*

# Improved tendon thickness and integrity was sustained five years after treatment with the REGENETEN<sup>◇</sup> Bioinductive Implant

## + Plus points

Comparison of 5-year findings with 2-year follow-up:

73%

Most patients had no decline in tendon integrity



**Significant improvements** in pain and function sustained to 5 years



**No additional complications**

## Overview

- Five-year follow-up of a prospective, single-arm study evaluating REGENETEN Bioinductive Implant in lieu of repair in patients with partial-thickness rotator cuff tears
- 11/13 enrolled patients (mean age, 54.0 years) were available for assessment
- Outcomes were assessed 5 years postoperatively and were compared to findings at 2 years (previously reported):
  - MRI assessment of tendon integrity and thickness
  - Patient-reported outcomes (American Shoulder and Elbow Surgeons [ASES] shoulder scale and Constant-Murley shoulder score)

## Results

- 8/11 patients (73%) had no decline in tendon integrity between 2 and 5 years (Figure)
- Tendon thickness significantly decreased between 2 and 5 years (5.9 vs 5.2mm;  $p=0.0012$ ), but remained significantly greater than preoperative values (4.2mm;  $p<0.0001$ ; Figure)
- Significant improvements from baseline in pain and function were sustained to 5 years ( $p\leq 0.01$ ) and were not significantly different to 2-year values
- No additional complications between 2 and 5 years

### 11 patients available for 5-year follow-up



**n=8**  
No decline in tendon integrity



**n=2**  
New low grade tears at original site



**n=1**  
New low grade tear distinct from original site

Figure. Change in tendon integrity (MRI) between 2- and 5-year follow-up

## Conclusions

REGENETEN Bioinductive Implant demonstrated sustained effectiveness in improving tendon thickness and integrity, with no reduction in patient-reported outcomes between 2 and 5 years.

## Citation

\*Bokor DJ, Sonnabend DH, Deady L, et al. Healing of partial-thickness rotator cuff tears following arthroscopic augmentation with a highly-porous collagen implant: a 5-year clinical and MRI follow-up. *MLTJ*. 2019;9(3):338-347.

Available at: [Muscles, Ligaments and Tendons Journal](https://doi.org/10.1177/1043986219850000)