



Analysis of a randomized control trial demonstrated the addition of the REGENETEN[®] Bioinductive Implant to rotator cuff repair (RCR) is cost-effective in medium to large full thickness tears (1-4cm)¹

Hurley ET, Ruiz Ibán MA, Oeding MS, et al. Bio-inductive collagen implant augmentation for arthroscopic rotator cuff repair is cost-effective in medium to large tears for reducing retears – a secondary analysis of a randomized controlled trial

Available at: [Arthroscopy](#)  

Key points

Data from the Ruiz-Ibán RCT demonstrated the **addition of the REGENETEN Implant to full thickness tears led to three times fewer re-tears (8% vs 26%)** at one year follow up. In a secondary analysis of these data, the addition of the REGENETEN Implant was determined to be cost effective compared to RCR alone demonstrating:¹



Approx \$7,000 saving per patient over 10 years



Higher quality of life over 10 years measured by QALY (5.6 vs 4.3)



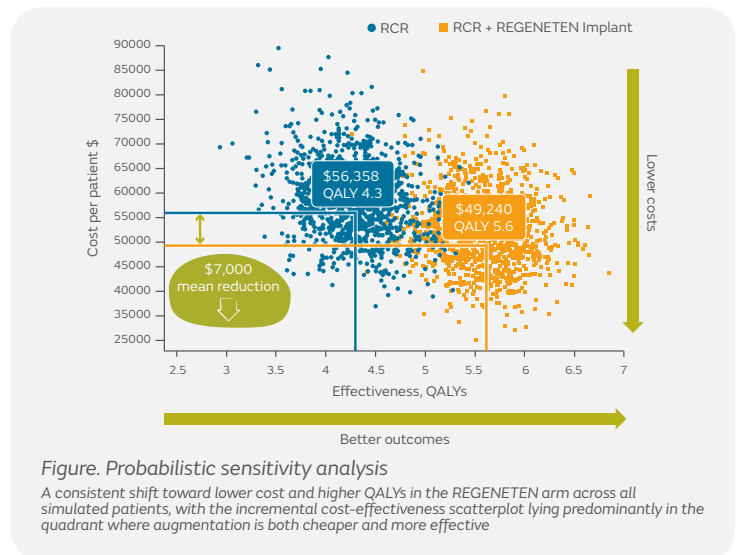
The analysis suggests greater value when the REGENETEN implant is added to RCR

Overview

- A cost effectiveness analysis of adults with symptomatic, medium-to-large full-thickness rotator cuff tears undergoing repair (RCR) vs RCR augmented with the REGENETEN Implant
- Clinical inputs: Retear rates and complications from an RCT of RCR vs RCR augmented with the REGENETEN Implant (n=124).² [Available here](#)
- Model structure: 10-year Markov model with health states for intact repair, re-tear, revision to reverse shoulder arthroplasty and death. Modelled for 1000 patients
- Perspective and cost basis: US payer perspective using published tariffs and unit costs for procedures, imaging, follow-up, complications, and implants; both costs and QALYs discounted at 3% per year
- Outcomes: Total and incremental costs, cost per QALY, and probability that inclusion of the REGENETEN Implant is the most cost-effective option across willingness-to-pay thresholds

Results

- Over 10 years, mean total costs were lower with RCR augmented with the REGENETEN Implant (\$49,240) compared with RCR alone (\$56,358), corresponding to an average saving of approximately \$7,119 per patient
- Patients receiving RCR augmented with the REGENETEN Implant accrued more quality-adjusted life years (5.6 vs 4.3), reflecting improved long-term health-related quality of life (Figure)
- The incremental cost-effectiveness ratio (ICER) indicated that augmentation with the REGENETEN Implant was associated with better outcomes at lower cost, with standard RCR classified as dominated i.e., Standard RCR was demonstrated to be more costly and less effective
- Addition of the REGENETEN Implant was preferred in all simulations across willingness-to-pay thresholds
- Retear risk after augmented repair would need to rise to around 23% before standard RCR became the more cost-effective option at a \$50,000 per QALY threshold



Conclusions

In this cost effectiveness analysis, repair of full-thickness rotator cuff tears augmented with the REGENETEN Bioinductive Implant was associated with lower long-term healthcare costs and improved patient outcomes compared with RCR alone.

References

1. Hurley ET, et al. *Arthroscopy*. 2026. Online ahead of print <https://doi.org/10.1002/ajrj.70000>
2. Ruiz Ibán MA, et al. *Arthroscopy*. 2024;40(6):1760-1773.

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