

## Clinical Summary

# The Next Frontier for Rotator Cuff Augmentation? Strength + Bio-Induction

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### Aim:

To evaluate the potential of a novel bio-composite scaffold (BioBrace®) for rotator cuff repair (RCR) augmentation, combining mechanical strength with bioinductive properties to address high re-tear rates in large, massive, and revision rotator cuff tears.

### Why Augment in Rotator Cuff Repair?

To evaluate the potential of a novel bio-composite scaffold (BioBrace®) for rotator cuff repair (RCR) augmentation, combining mechanical strength with bioinductive properties to address high re-tear rates in large, massive, and revision rotator cuff tears.

High retear rates persist in large to massive rotator cuff tears and revision cases, primarily due to:

1. Poor tissue quality
2. Mechanical failures

### Surgical Pearls for BioBrace® in RCR

To evaluate the potential of a novel bio-composite scaffold (BioBrace®) for rotator cuff repair (RCR) augmentation, combining mechanical strength with bioinductive properties to address high re-tear rates in large, massive, and revision rotator cuff tears.

- BioBrace® is compatible with all arthroscopic technique.
- BioBrace® holds 5cc of whole blood, BMAC, or PRP.
- Hydrate BioBrace® for easier handling.
- Sutures can be passed outside the body and then parachuted through a 10-12mm cannula.

### Key Takeaways

BioBrace® represents a next-generation solution for rotator cuff augmentation by bridging the gap between biologic and mechanical support.

- BioBrace® is a novel bio-composite scaffold combining:
  - » Type I collagen (bioinductive, 80% porous) designed to induce new tissue ingrowth for thicker tendon tissue.
  - » PLLA microfilaments for mechanical strength at time zero and throughout the healing process. The PLLA has strength for up to 2 years before fully resorbing

BioBrace® addresses both unmet clinical needs and poor healing via its highly porous collagen sponge, and mechanical failure via its PLLA backbone, providing supplemental strength throughout the healing process.