

## The Problem:

Patients dissatisfied with traditional surgical procedures for thumb carpometacarpal arthritis.<sup>1</sup>

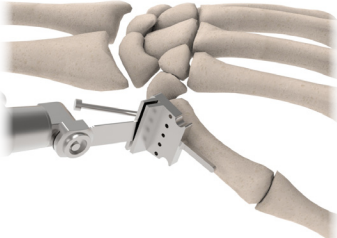
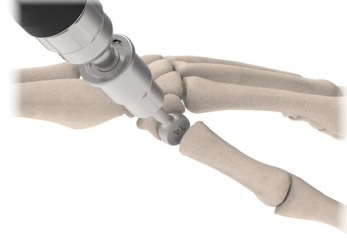
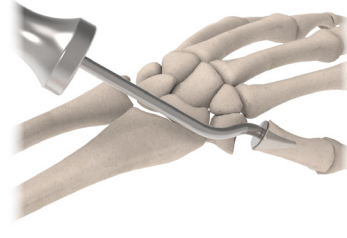
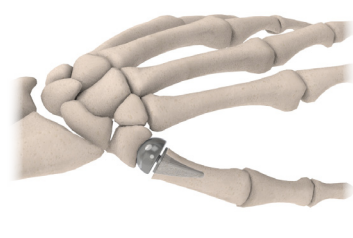


## The Solution:

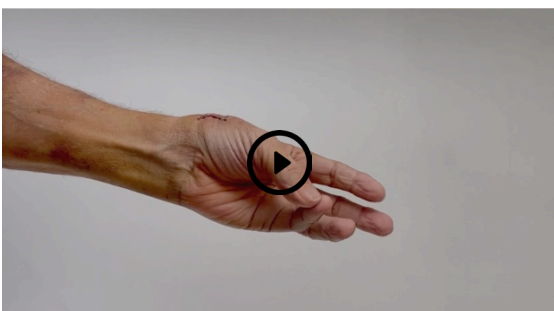
### The BioPro<sup>®</sup> Modular Thumb Implant

The BioPro Modular Thumb Implant is a two-piece implant consisting of a head and a press-fit plasma-sprayed stem. The implant is supported by two decades of combined clinical experience and research with published 10 year outcomes.<sup>2</sup>

## How it works

Resection	Burr	Broach	Implant
			
<p>A precision cutting guide is engineered to remove 5-6mm of bone from the base of the metacarpal parallel to the articular surface.</p>	<p>Coarse and fine 12-15mm hemispherical burrs are utilized to create a shallow socket in the trapezium.</p>	<p>Compression broaches matching the implant stem are inserted into the metacarpal to ensure a tight medullary interference fit.</p>	<p>After trialing, the final two piece implant is assembled and press-fit into the joint. Rapid mobilization is possible with average full recovery in 8-12 weeks.</p>

## Patient Stories



A retired orthopedic surgeon traveled to Miami, FL, to undergo a joint replacement by Alejandro Badia, MD. He required no pain medication and at only 7 days post-op, he showed off the thumb's range of motion and function.

### View more patient stories

[arthritisofthethumb.com/patient-stories](http://arthritisofthethumb.com/patient-stories)  
[bioproimplants.com/thumb-arthritis](http://bioproimplants.com/thumb-arthritis)

# Our patented approach to thumb joint replacement.

## Advantage 1: Maintains Thumb Length

The procedure leaves the anatomy intact, only creating a shallow socket within the trapezium for the head to articulate. Follow up at an average of 6-years shows the procedure preserved metacarpal length and cosmetics in all patients.<sup>2</sup>

## Advantage 2: Fast Recovery

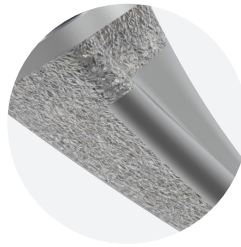
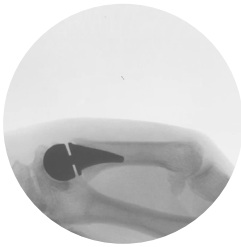
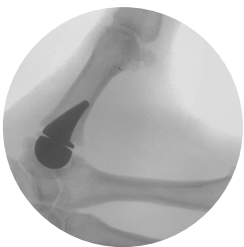
The procedure may allow patients to begin strengthening exercises at four to six weeks with full recovery by 12 weeks.<sup>2</sup>

## Advantage 3: High Patient Satisfaction

Quick recovery, pain reduction, and return of strength has led to a patient satisfaction rate of 97%. All patients surveyed that received both the BioPro Modular Thumb Implant and a trapeziectomy with ligament reconstruction, preferred the BioPro Modular Thumb Implant.<sup>2</sup>

## Advantage 4: Doesn't Burn Bridges

Since the trapezium is preserved, multiple revision options are available including implant arthroplasty and a trapeziectomy with or without suspension.<sup>2</sup>



### Ulnar Alignment

The stem features a 15 degree varus angle resulting in an ulnar alignment of the implant which directs the head of the implant to prevent dislocation during flexion and opposition.

### Titanium Plasma Spray

The stem features titanium plasma spray on the backside of the implant as well as underneath the platform. This allows for improved in-growth while still allowing the stem to be easily removed if necessary.

### Modular Design

The system features 48 possible configurations. The modular design allows the head to be sized independently of the stem to match the patient's anatomy.

#### References

1. Hawken JB, Yousaf IS, Sanghavi KK, Higgins JP, Giladi AM, Means KR Jr. Thumb Carpometacarpal Arthritis Surgery: The Patient Experience. *Plast Reconstr Surg.* 2021 Oct 1;148(4):809-815. doi: 10.1097/PRS.00000000000008313.
2. Pritchett JW, Habryl LS. A promising thumb Basal joint hemiarthroplasty for treatment of trapeziometacarpal osteoarthritis. *Clin Orthop Relat Res.* 2012 Oct;470(10):2756-63. doi: 10.1007/s11999-012-2367-7.

This content is provided as an educational tool only and is not meant as medical advice in the usage of specific BioPro products. A healthcare professional must use their professional judgment in making any final determinations in product usage and technique. The product's Instructions for Use, should always be reviewed prior to surgery. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes. This information does not constitute medical, legal, or any other type of professional advice and should not be relied upon as such. It is not to be redistributed, duplicated, or disclosed without the express written consent of BioPro, Inc.



BioPro, Inc.  
2929 Lapeer Road, Port Huron, MI 48060, USA  
info@bioproimplants.com | 1-810-982-7777  
[www.bioproimplants.com](http://www.bioproimplants.com)

BIOLOGICALLY ORIENTED PROSTHESES  
**BIO PRO**