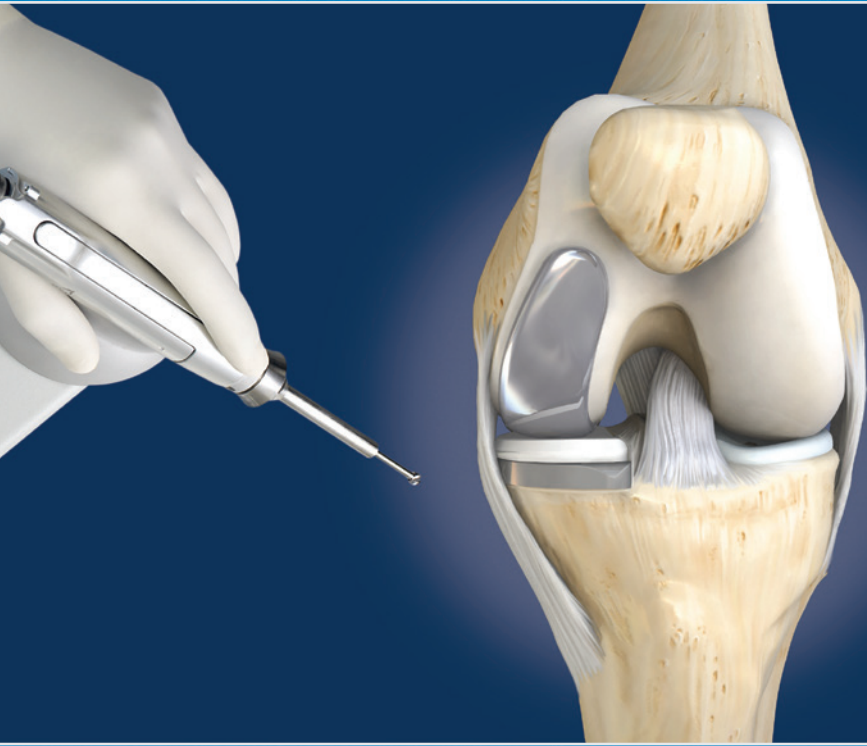
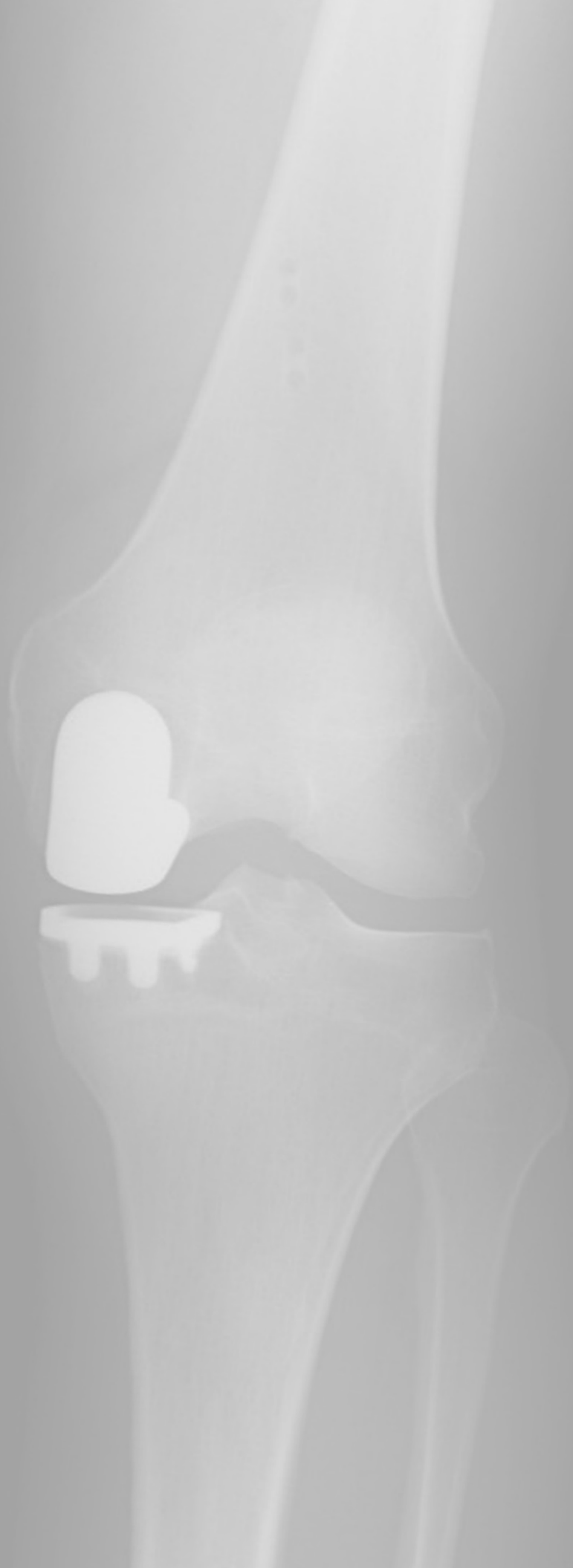


MAKOplasty®
Partial Knee Resurfacing



A Minimally Invasive Alternative for Patients
with Isolated Osteoarthritis of the Knee

INFORMATION FOR REFERRING PHYSICIANS



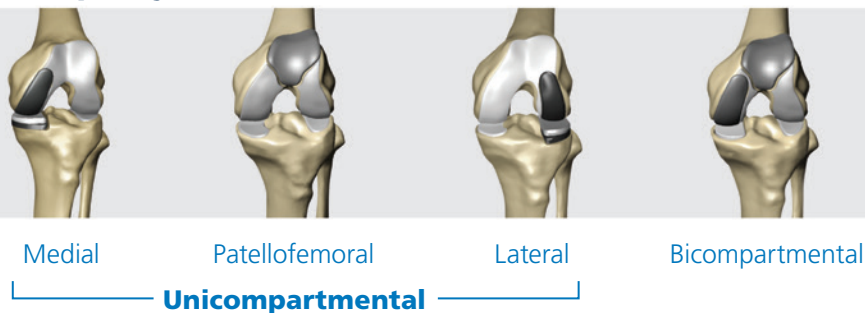
MAKOplasty®

Partial Knee Resurfacing

When your patients with osteoarthritis (OA) no longer respond to non-surgical treatments or medications, they may be candidates for MAKOplasty Partial Knee Resurfacing.

MAKOplasty Partial Knee Resurfacing (PKR) is an advanced treatment option for adults who have osteoarthritis that has not yet progressed to all three compartments of the knee. MAKOplasty offers a comprehensive range of solutions including:

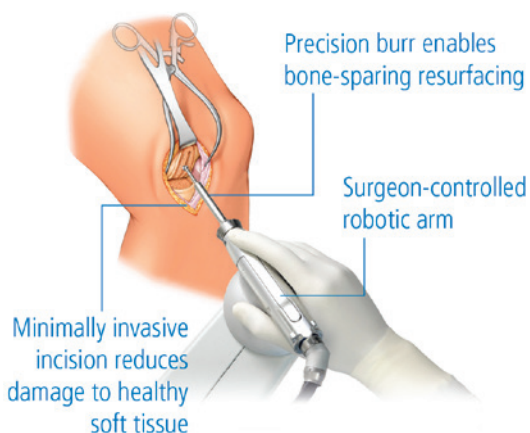
MAKOplasty Solutions



While total knee arthroplasty (TKA) is a safe and effective treatment option for people with osteoarthritis in their entire knee, it is not always the optimal solution for those with osteoarthritis isolated to only one or two compartments. Partial knee resurfacing spares the ACL and PCL ligaments, as well as healthy bone and tissue.

MAKOplasty Partial Knee Resurfacing Offers Many Benefits Over Total Knee Arthroplasty, Including:

- Smaller incision and less scarring
- Bone sparing and soft-tissue preserving
- Shorter hospitalization
- Greater range of motion¹
- A more natural feeling knee²



MAKOplasty® Overcomes the Challenges of Manual Partial Knee Arthroplasty

Manual partial knee procedures are technically challenging and difficult to perform with accuracy. Some of the limitations with manual procedures include:

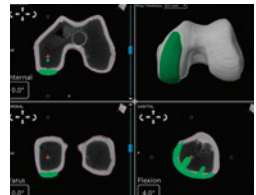
- Restricted visual field
- Substantial complication rates that persist throughout the learning curve³
- High failure rates associated with inaccurate placement⁴

The Advantages of MAKOplasty Partial Knee Resurfacing

MAKOplasty Partial Knee Resurfacing is powered by the surgeon-controlled RIO® Robotic Arm Interactive Orthopedic System, which enables surgeons to plan and perform the procedure with consistently reproducible precision.

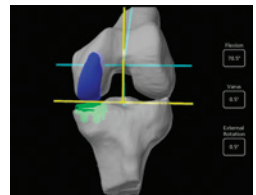
Patient-specific Pre-operative Planning

Using the patient's CT scan, a 3-D model is created to plan implant size, placement, and alignment specific to each patient's unique anatomy.



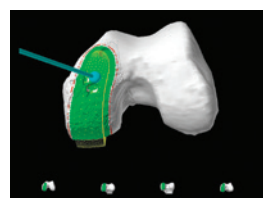
Intra-operative Soft-tissue Balancing

MAKOplasty provides surgeons with real-time data, enabling assessment of ligament tension throughout range of motion and implant articulation. This enables surgeons to fine tune the plan intra-operatively, if needed, for more accurate soft-tissue balance.



Robotic Arm Assisted Resection

The RIO system provides visual, auditory, and tactile feedback during bone resurfacing to help ensure accurate implant fit while conserving bone.



MAKOplasty® Clinical Effectiveness

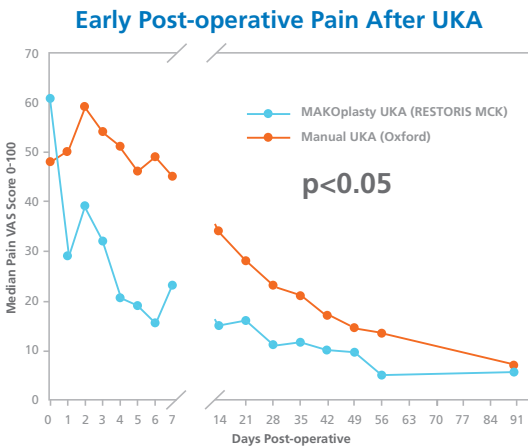
Following are results of several studies demonstrating the clinical benefits of robotic arm assisted MAKOplasty Partial Knee Resurfacing.

Low Two-Year Revision Rates

MAKOplasty PKR demonstrated a low revision rate of 1.1% at two years in a study of 752 patients (854 knees). National Joint Registries cite average revision rates of 4.5% to 4.8% for manual PKR.⁵

Unicompartmental (UKA) MAKOplasty vs. Manual Oxford®

Early results of an ongoing randomized controlled trial (RCT) show more accurate implant placement with medial UKA MAKOplasty procedures using RESTORIS® MCK implants, than with manual UKA procedures using Oxford® implants. The study also found MAKOplasty resulted in less pain for the first eight weeks after surgery. Comparing American Knee Society Scores, MAKOplasty patients also had increased post-operative functionality at three months post-surgery.⁶



Bicompartmental MAKOplasty vs. Total Knee Arthroplasty

A study comparing bicompartmental MAKOplasty procedures with total knee arthroplasty found that MAKOplasty Partial Knee Resurfacing demonstrated improved function, better post-operative range of motion, and better quadriceps strength.⁷



RIO® Robotic Arm Interactive
Orthopedic System

Oxford is a registered trademark of Biomet, Inc.

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4. Epinette JA, Brunsweller B, Mertl P, Mole D, Cazenave A. Unicompartmental knee arthroplasty modes of failure: Wear is not the main reason for failure: A multicenter study of 418 failed knees. *Orthop Traumatol Surg Res*. October 2012;98(6 suppl):S124-30.
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The information provided herein assumes in every case an in-depth consultation between the healthcare practitioner and the patient considering MAKOplasty. Only a licensed physician can adequately diagnose and explain an underlying orthopedic condition, the natural progression of the condition without intervention, the potential clinical benefits of the MAKOplasty procedure, medically acceptable alternative procedures, and the potential complications and risks of any procedure and/or operation. MAKOplasty is not for everyone. The physician is at all times responsible for carefully selecting MAKOplasty patient candidates and guiding them on all aspects of surgery, including pre and post-operative care. Individual clinical results will vary.

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MAKOplasty®

